NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

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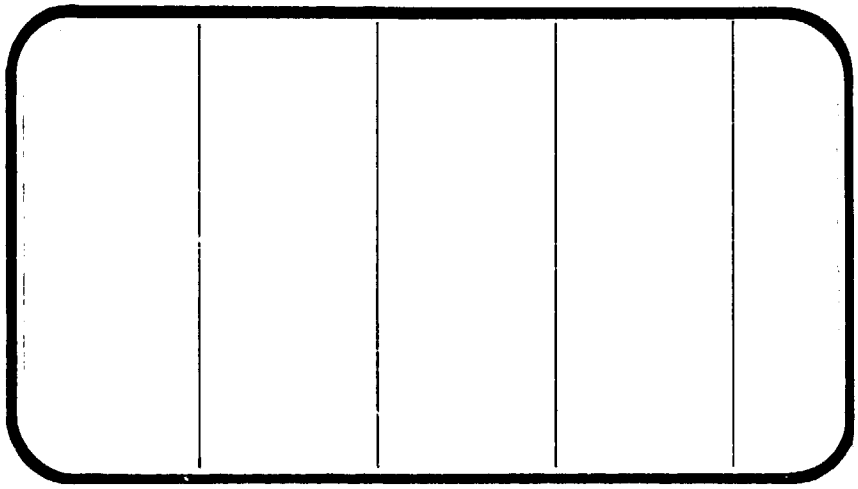

(NASA-CR-141501) AIRLOADS INVESTIGATION OF AN 0.030-SCALE MODEL OF THE SPACE SHUTTLE VEHICLE 140A/B LAUNCH CONFIGURATION (MODEL 47-OTS) IN THE ARC 11-FOOT UNITARY PLAN WIND TUNNEL FOR MACH RANGE 0.6 TO 1.4 (IA14A). G3/18

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SPACE SHUTTLE

AEROTHERMODYNAMIC DATA REPORT

JOHNSON SPACE CENTER

HOUSTON, TEXAS

DATA MANagement services

SPACE DIVISION CHRYSLER CORPORATION

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VOLUME 9 OF 11

AIRLOADS INVESTIGATION OF AN 0.030-SCALE MODEL OF THE SPACE SHUTTLE VEHICLE 140A/B LAUNCH CONFIGURATION (MODEL 47-OTS) IN THE ARC 11-FOOT UNITARY PLAN WIND TUNNEL FOR MACH RANGE 0.6 TO 1.4 (IA14A)

by

R. L. Gillins
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Prepared under NASA Contract Number NAS9-13247

by

Data Management Services
Chrysler Corporation Space Division

for

Engineering Analysis Division

Johnson Space Center
National Aeronautics and Space Administration
Houston, Texas

WIND TUNNEL SPECIFICS:

Test Number:	ARC 11-716
NASA Series No.:	IA14A
Model Number:	47-OTS
Test Dates:	4 through 13 September 1973

FACILITY COORDINATOR:

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AIRLOADS INVESTIGATION OF AN 0.030-SCALE MODEL OF THE SPACE SHUTTLE VEHICLE 140A/B LAUNCH CONFIGURATION (MODEL 47-OTS) IN THE ARC 11-FOOT UNITARY PLAN WIND TUNNEL FOR MACH RANGE 0.6 TO 1.4 (IA14A)

VOLUME 9

By R. L. Gillins, Rockwell International Space Division

ABSTRACT

This report presents results of tests conducted on an 0.030-scale launch configuration model of the Space Shuttle Vehicle 140A/B in the NASA/ARC 11-Foot Unitary Plan Wind Tunnel. Aerodynamic loads data were obtained at Mach numbers from 0.6 to 1.4.

Surface pressure distributions were obtained simultaneously with six-component stability and control force data on the complete launch configuration. The configuration consisted of the orbiter, an external tank, two solid rocket boosters, and associated intercomponent attach hardware. Angles of attack and sideslip from -10 degrees to +10 degrees were investigated. The tests, designated IA14A, were conducted from 4 September 1973 through 13 September 1973.

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INTRODUCTION

The 0.030-scale aero loads Space Shuttle Model was tested in the ARC Unitary Plan Wind Tunnels as follows:

IA14A	4 thru 13 Sept. 1973
IA14B	17 thru 19 Sept. 1973
OA22A	13 thru 14 Sept. 1973
OA22B	19 thru 20 Sept. 1973

For tests IA14B, OA22A, and OA22B, see reference 34, 35, and 36, respectively.

The testing was conducted in the 11-foot and the 9- by 7-foot tunnels of the ARC Unitary Plan Wind Tunnels. The IAI4A/B tests were for the launch configurations at Mach numbers from 0.6 to 2.2. The OA22A/B tests were for the orbiter alone configuration at Mach numbers from 0.6 to 2.2. The effects of control surface deflections were also investigated in tests OA22A/B.

This report for test IA14A consists of one volume of force data and ten volumes of pressure data for a total of eleven volumes arrayed in the following manner:

Volume No.	Contents	Page
1.	IA14A force data	
2.	IA14A plotted pressure data	
3.	IA14A tabulated pressure data	
	(a) Orbiter fuselage (B)	1-725
	(b) Orbiter base (C)	726-918

NOMENCLATURE
General

SYMBOL	SADSAC SYMBOL	DEFINITION
a		speed of sound; m/sec, ft/sec
C_p	CP	pressure coefficient; $(p_l - p_\infty)/q$
M	MACH	Mach number; V/a
p		pressure; N/m^2, psf
q	Q(NSM) Q(PSF)	dynamic pressure; $1/2\rho V^2$, N/m^2, psf
RN/L	RN/L	unit Reynolds number; per m, per ft
V		velocity; m/sec, ft/sec
α	ALPHA	angle of attack, degrees
β	BETA	angle of sideslip, degrees
ψ	PSI	angle of yaw, degrees
ϕ	PHI	angle of roll, degrees
ρ		mass density; kg/m^3, $slugs/ft^3$
		Reference & C.G. Definitions
A_b		base area; m^2, ft^2
b	BREF	reference span; m, ft
c.g.		center of gravity
$\bar{c}$		reference length or wing mean aerodynamic chord; m, ft
S	SREF	wing area or reference area; m^2, ft^2
	MRP	moment reference point
	XMRP	moment reference point on X axis
	YMRP	moment reference point on Y axis
	ZMRP	moment reference point on Z axis

SUBSCRIPTS

b	base
l	local
s	static conditions
t	total conditions
∞	free stream

NOMENCLATURE (Continued)

Body-Axis System

SYMBOL	SADSAC SYMBOL	DEFINITION
C_N	CN	normal-force coefficient; $\frac{\text{normal force}}{qS}$
C_A	CA	axial-force coefficient; $\frac{\text{axial force}}{qS}$
C_Y	CY	side-force coefficient; $\frac{\text{side force}}{qS}$
C_{A_b}	CAB	base-force coefficient; $\frac{\text{base force}}{qS}$ $-A_b(p_b - p_\infty)/qS$
C_{A_f}	CAF	forebody axial force coefficient, $C_A - C_{A_b}$
C_m	CLM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS\ell_{REF}}$
C_n	CYN	yawing-moment coefficient; $\frac{\text{yawing moment}}{qSb}$
C_ℓ	CBL	rolling-moment coefficient; $\frac{\text{rolling moment}}{qSb}$
		Stability-Axis System
C_L	CL	lift coefficient; $\frac{\text{lift}}{qS}$
C_D	CD	drag coefficient; $\frac{\text{drag}}{qS}$
C_{D_b}	CDB	base-drag coefficient; $\frac{\text{base drag}}{qS}$
C_{D_f}	CDF	forebody drag coefficient; $C_D - C_{D_b}$
C_Y	CY	side-force coefficient; $\frac{\text{side force}}{qS}$
C_m	CLM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS\ell_{REF}}$
C_n	CLN	yawing-moment coefficient; $\frac{\text{yawing moment}}{qSb}$
C_ℓ	CSL	rolling-moment coefficient; $\frac{\text{rolling moment}}{qSb}$
L/D	L/D	lift-to-drag ratio; C_L/C_D

NOMENCLATURE (Continued)
Additions To Standard List

Symbol	SADSAC Symbol	Definition
$A_{(\ )}$		model base area, subscript is base orifice number and identifies location
C_{A_b}	CAB	model base axial-force coefficient
$C_{p_{(\ )}}$		model static pressure coefficient, subscript is orifice number, $[p_{(\ )} - p_\infty]/q$
C_{AU}	CA	axial-force coefficient, unadjusted
C_{AF}	CAF	forebody axial-force coefficient, C_{AU} adjusted for base terms
ET		external tank
IV		integrated vehicle, consists of orbiter, external tank, and two solid rocket motors
ℓ_{REF}	LREF	reference length, inches
MRC		moment reference center
OMS		orbital maneuvering system
δ_e	ELEVON	elevon, surface deflection angle, positive deflection trailing edge down, degrees
δ_f	BDFLAP	orbiter body flap deflection angle, positive deflection angle is trailing edge down, degrees
δ_R	RUDDER	rudder, surface deflection angle, positive deflection trailing edge to the left, degrees
δ_{SB}	SPDBRK	speed brake deflection angle, left split rudder trailing edge left and right split rudder trailing edge right, $\delta_{SB} = (\delta_{RL} + \delta_{RR})/2$, positive deflection, degrees
i_o	ORBINC	incidence angle between the orbiter and external tank, $i_0 = \alpha_0 - \alpha_T$, degrees

NOMENCLATURE (Continued)

β_T	BETAT	angle of sideslip of external tank, degrees
α_T	ALPHAT	angle of attack of external tank, degrees
ℓ_B	LB	length of orbiter body, in
ℓ_T	LT	length of external tank, in
ℓ_S	LS	length of SRM booster, in
ℓ_{NM}	LNM	length of OMS nozzle, positive direction forward of exit plane, in
ℓ_{NP}	LNP	length of MPS nozzle, positive direction forward of exit plane,in
b/2	BW	wing semi-span, in
b_v	BV	vertical tail span, in
x	X	distance from component nose, in
y	Y	lateral distance from centerline, in
z	Z	vertical distance measured from W.L. 500 (vertical tail reference root chord), in
c_w	CW	local wing chord, in
c_v	CV	local vertical tail chord, in
x/ℓ_B	X/LB	longitudinal position/orbiter body length
x/ℓ_T	X/LT	longitudinal position/external tank length
x/ℓ_S	X/LS	longitudinal position/booster length
x/ℓ_{NM}	X/LNM	longitudinal position/OMS nozzle length

NOMENCLATURE (Concluded)

x/ℓ_{NP}	X/LNP	longitudinal position/MPS nozzle length
x/c_w	X/CW	local chordwise position/local wing chord length
x/c_v	X/CV	local chordwise position/local vertical tail chord length.
η	Y/BW	local spanwise position/wing semi-span
η_v	Z/BV	local spanwise position/vertical tail span
x_{CP}/ℓ	XCP/L	center of pressure distance from MRC, expressed as a fraction of body length
β_0	BETAO	angle of sideslip of orbiter
α_0	ALPHAO	angle of attack of orbiter

CONFIGURATIONS INVESTIGATED

The 0.030-scale Aero Loads Model, 47-OTS, was configured after the Shuttle Vehicle MCR 0200 Baseline R1, as defined in drawing number VL70-000088B. The orbiter configuration was a combination of the VL70-000140A orbiter and a VL70-000140B wing and midbody, from which the 140A/B designation was derived. The basic launch configuration consisted of the orbiter, an external tank with simulated fuel and vent lines, and two solid rocket boosters, designated O_1 T_{12} S_{12} N_{25}.

Three launch configurations were tested. One was the basic configuration described above mounted on a dual balance and sting arrangement, illustrated in figure 2d. A second contained attach hardware, designated AT_{10}, mating the orbiter with the external tank and mounted on a single sting and balance in the orbiter, illustrated in figure 2b. The third utilized a similar attach hardware configuration, designated AT_{11}, which was attached to the orbiter but not to the external tank and was mounted on the same dual sting and balance arrangement as the basic configuration (figure 2c). In all three configurations, the SRB-to-ET attach hardware was simulated at the forward attach location but not at the aft attach location. Model and component general arrangements are shown in figures 2e through 2o.

Component	Description
O_1	140A/B orbiter minus the main propulsion system nozzles
T_{12}	324-inch diameter external tank with ogive nose and external fuel and vent lines
S_{12}	142.3-inch diameter solid rocket boosters

N_{25}	Nozzles for S_{12} boosters
AT_{10}	Orbiter-to-ET attach hardware, fixed to both vehicles
AT_{11}	Orbiter-to-ET attach hardware, fixed to orbiter only
LV	O_1 T_{12} S_{12} N_{25}
LVA	O_1 T_{12} S_{12} N_{25} AT_{10}
LVAP	O_1 T_{12} S_{12} N_{25} AT_{11}

The orbiter O_1, consisted of the following components:

B_{26} C_9 F_8 M_7 N_{28} V_8 R_5 W_{116} E_{26}.

B_{26}	Double delta wing fuselage, 140A/B
C_9	Canopy, 140A
F_8	Body flap, 140A
M_7	OMS pods, 140A
N_{28}	OMS nozzles, 140A
V_8	Vertical tail, 140A
R_5	Rudder, 140A
W_{116}	Double delta wing, 140B
E_{26}	Elevons, 140B

Parametric investigations were limited to angles of attack and sideslip with all orbiter control surfaces at 0° deflection.

INSTRUMENTATION DESCRIPTION

The left side of the orbiter and the external tank and the left hand SRB were extensively instrumented with pressure orifices for measurement of surface static pressure distributions. Additionally, there were clusters of orifices around inter-component attach structure locations on the right hand side of the orbiter and external tank. The orbiter contained 471 operational orifices, of which 83 were clustered around attach structure. The external tank contained 270 operational orifices, of which 127 were clustered around attach structure. The SRB contained 124 operational orifices. A three-tube total pressure rake was installed in the opening between the orbiter and external tank. Tables and sketches defining orifice locations are included in this report. All model pressures were measured by model mounted Scanivalve, Inc., S-type scanivalve modules - twelve in the orbiter, seven in the external tank, and five in the SRB.

Force instrumentation consisted of a six-component internal force balance in both the orbiter and external tank for the LV and LVAP configurations, and a single six-component internal force balance in the orbiter for the attached LVA configuration.

TEST FACILITY DESCRIPTION

The tests were conducted in the Ames 11- by 11-Foot Transonic Wind Tunnel which is a variable density, closed return, continuous flow type. This tunnel has an adjustable nozzle (two flexible walls) and a slotted test section to permit transonic testing over a Mach number range continuously variable from 0.4 to 1.4.

DATA REDUCTION

Data were reduced to coefficient form about body axes using the following reference constants:

$S_{REF} = 2.421\ ft^2$	reference area for force and moment coefficients
$\ell_{REF} = 38.709\ in$	reference length for moment coefficients
$A_1 = 0.07670\ ft^2$	Orbiter sting cavity
$A_2 = 0.21340\ ft^2$	Orbiter heat shield base
$A_3 = 0.08560\ ft^2$	Orbiter OMS base (2)
$A_4 =$ (see table below)	Orbiter speed brake base
$A_{501} = 0.07266\ ft^2$	Tank sting cavity
$A_{502} = 0.44264\ ft^2$	Tank base
$A_{801} = 0.19600\ ft^2$	SRM nozzle base (2)
$A_{802} = 0.16590\ ft^2$	SRM skirt base (2)

δ_{SB}	A_4
0 deg	0 ft^2
14.92	0.02327
24.92	0.03866
34.92	0.05370
54.92	0.08252
84.92	0.12083

$X_{MRP} = 0$ in

$Y_{MRP} = 0$ in

$Z_{MRP} = 9.99$ in

The incidence angle between the orbiter and the external tank is equal to zero for angle of attack and angle of sideslip. Therefore, the angle of attack, ALPHA, used in the force plots is equal to ALPHAO. Also the angle of sideslip, BETA, used in the force plots is equal to BETAO.

The force and moment data recorded by the orbiter balance for configuration LV and LVAP are identified as RB10XX datasets. Force and moment data recorded by the tank balance for configuration LV and LVAP and by the orbiter balance for LVA (composite) are identified by RB11XX.

The pressure data were recorded for each component. The fourth character in each dataset identifier (i.e. RB1BXX, B for fuselage) represents the individual component. The following list indicates the symbol for each component.

SYMBOL	COMPONENT
B	Orbiter fuselage
C	Orbiter base
E	OMS nozzle
F	Body flap
M	OMS pod outside
L	Lower wing surface
U	Upper wing surface
R	Right vertical tail surface
V	Left vertical tail surface
S	SRM booster
T	External tank
X	SRM nozzle

SYMBOL	COMPONENT
Y	External tank base & SRM booster base
1	Orbiter attach points
2	External tank attach points
3	External tank base rake

REFERENCES

1. Orbiter - Lines and Configuration Control Drawings

2. VL70-000140A, Orbiter Configuration Control Drawing MCR 0200 Baseline

3. VL70-000143A, Lines Control, Vehicle 4 Forward Body - Cabin - Canopy MCR 0200 Baseline

4. VL70-000200, Lines Control, Midbody - Wing - Boot Fairing MCR 200 R3 dated 7-2-73

5. VL70-000145, Lines Control - Aft Body - OMS/RCS Pods, MCR 0200 - R1 baseline

6. VL70-000146A, Lines Control (Vehicle 4) Vertical Tail MCR 0200 Baseline

7. External Oxygen Hydrogen Tank (EOHT) - Lines and Configuration Control Drawings

8. VL78-000041B, External Tank - Configuration Control MCR 0200 Baseline R2

9. VL78-000024A, Structural Assy - External Tank MCR 0200 R2

10. VL78-000031A, Thermal Protection - External Tank, MCR 0200 Baseline

11. Solid Rocket Boosters (SRB) - Lines and Configuration Control Drawings

12. VL77-000036A, SRB Configuration Control MCR 0200 R1

13. VL77-000041, SRB Booster Assy, MCR 0200 R1

14. Integrated Vehicle - Lines and Configuration Control Drawings

15. VL72-000088A, Shuttle Configuration MCR 0200 Baseline R1

16. VL72-000089, SRB-ET-Orbiter Interface Disconnects MCR 0200 Baseline

17. VL72-000075, External Tank to SRB Attach Interface MCR 0074 Baseline

18. Aero Loads Model 47-OTS - Model Fabrication, Assembly and Installation Drawings

19. SS-A00119, Orbiter Assy - .030 Scale Pressure/Loads Model (140A/B Lines)

20. SS-A00120, Assy & Details - EOHT - .030 Scale Pressure/Loads Model (140A Lines)

21. SS-A00121, Orbiter/EOHT Attachments .030 Scale Pressure/Loads Model (140A Lines)

22. SS-A00122, Assy & Details - SRM - .030 Scale Pressure/Loads Model (140A Lines)

23. SS-A00123, Assy & Details - Forebody - .030 Scale Pressure/Loads Model (140A Lines)

24. SS-A00124, Assy & Details - Aft Fuselage - .030 Scale Pressure/Loads Model (140A Lines)

25. SS-A00125, Assy & Details - Wing Splice Plate & Cuff - .030 Scale Pressure/Loads Model (140A Lines)

26. SS-A00126, Assy & Details - Vertical Stabilizer - .030 Scale Pressure/Loads Model (140A Lines)

27. SS-A00127, Ames 11-ft x 11-ft Wind Tunnel Installation - .030 Scale Pressure/Loads Model (140A/B Lines)

28. SS-A00128, Ames 9-ft x 7-ft Wind Tunnel Installation - .030 Scale Pressure/Loads Model (140A/B Lines)

29. SS-A00130, Lines Control - Profile VL70-000140A - .030 Scale Pressure/Loads Model (140A/B Lines)

30. W-1104S Sting - Ames MK II 4" Balance (Male End), Ames MK XX 2.5" Balance

31. W-1105S, Sting - Ames MK II 4" Balance (Male End), RI MK I 2.75 Balance

32. W-1106A, Adapter - Ames MK II, 4" Balance (Male & Female)

33. W-1107A, 13.5" Bent Sting Adapter Ames MK II 4" Balance (Male & Female)

34. (DMS-DR-2129), "Airloads Investigation of an 0.030-Scale Model of the Space Shuttle Vehicle 140A/B Launch Configuration (Model 47-OTS) in the ARC 9- by 7-foot Unitary Plan Wind Tunnel for Mach Range 1.55 and 2.2 (IA14B)"

35. (DMS-DR-2130), "Airloads Investigation of an 0.030-Scale Model of the Space Shuttle Vehicle 140A/B Orbiter Configuration (Model 47-0) in the ARC 11-foot Unitary Plan Wind Tunnel for Mach Range 0.6 and 0.9 (OA22A)"

36. (DMS-DR-2131), "Airloads Investigation of an 0.030-Scale Model of the Space Shuttle Vehicle 140A/B Orbiter Configuration (Model 47-0) in the ARC 9- by 7-foot Unitary Plan Wind Tunnel for Mach Range 1.55 and 2.2 (OA22B)"

TABLE I.

TEST : IA-14A

DATE : 9-13-73

TEST CONDITIONS

MACH NUMBER	REYNOLDS NUMBER (per unit length)	DYNAMIC PRESSURE (pounds/sq. ft.)	STAGNATION TEMPERATURE (degrees Fahrenheit)
0.60	4.0×10^6	480	120
0.75	3.75×10^6	540	120
0.85	3.5×10^6	550	120
0.90	3.5×10^6	580	120
0.95	3.25×10^6	610	120
0.975	3.0×10^6	530	120
1.00	3.0×10^6	535	120
1.025	3.0×10^6	540	120
1.05	3.0×10^6	545	120
1.10	3.0×10^6	550	120
1.15	3.0×10^6	575	120
1.25	2.75×10^6	540	120
1.40	2.75×10^6	570	120

BALANCE UTILIZED: LVA: 2.5-in MK XX (ORBITER)
LVAP: 2.5-in MK XX (ORB.), 2.75-in MK I (ET)

	CAPACITY: MK XX	CAPACITY: MK I	ACCURACY: MK XX	ACCURACY: MK I	COEFFICIENT TOLERANCE:
NF	6000	7500			
SF	3000	3750	0.2%	0.2%	
AF	600	700	0.2%	0.2%	
PM					
RM	4000	4000	0.2%	0.2%	
YM					

COMMENTS: Test conditions for LVA and LVAP model configurations

TABLE I. - Concluded.

TEST : IA-14A

DATE : 9-13-73

TEST CONDITIONS

MACH NUMBER	REYNOLDS NUMBER (per unit length)	DYNAMIC PRESSURE (pounds/sq. ft)	STAGNATION TEMPERATURE (degrees Fahrenheit)
0.60	4.0×10^6	480	120
0.75	4.25×10^6	610	120
0.85	4.5×10^6	710	120
0.90	4.5×10^6	750	120
0.95	4.5×10^6	780	120
0.975	4.25×10^6	750	120
1.05	4.25×10^6	790	120
1.10	4.0×10^6	760	120
1.15	3.75×10^6	720	120
1.25	2.75×10^6	735	120
1.40	3.0×10^6	620	120

BALANCE UTILIZED: 2.5-in MK XX (ORB.), 2.75-in MK I (ET)

	CAPACITY: MK XX	CAPACITY: MK I	ACCURACY: MK XX	ACCURACY: MK I	COEFFICIENT TOLERANCE:
NF	6000	7500	0.2%	0.2%	
SF	3000	3750	0.2%	0.2%	
AF	600	700	0.2%	0.2%	
PM					
RM	4000	4000	0.2%	0.2%	
YM					

COMMENTS: Test conditions for LV model config.

TABLE II

TEST : IA-4A

DATA SET RUN NUMBER COLLATION SUMMARY

DATE 13 Sept 1973

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	CONTROL DEFLECTION	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 0.9	0.975	1.1	1.25
RBI.17	α1+T12+S12+N25+ATI1	3	0			4C	93	92	89
18	" +ATI1	C	3			+	0...	91	90
24	α1+T12+S12+N25+ATI0	-10	E			5*			
25		-8				9*			
26		-6				10*			
27		-4	-10			11*			
28		0	Y					38	
29		-10	0					39*	
30	α1+T12+S12+N25+ATI1	C	0						D/C 2

TEST RUN NUMBERS

1 3 13 19 25 31 37 43 49 55 61 67 75 76

CN CLI CA CAF CY CYN CEL

α SCHEDULE: α(E) = β(E) = -8, -4, C, 4, 8

β SCHEDULE: β(Z) = -10, 10

COEFFICIENT IDVAR (1): B(Y) = -10, -8, -6, -4, -2, 0

IDVAR (2): MACH (D) = 0.975, 1.0, 1.

NDV

NASA-MSFC-MAF

* FORCE DATA NOT AVAILABLE.

TABLE II - Continued

TEST: IA14A

DATA SET RUN NUMBER COLLATION SUMMARY

DATE: 12 Sept 1975

DATA SET IDENTIFIER	CONFIGURATION	SCHD.	PARAMETERS/VALUES				NO. OF RUNS	TEST RUN NUMBERS OR ALTERNATE INCREMENT VARIABLE														
		B	M	δc	δR	δs		-10	-8	-6	-4	-2	C	2	4	6	8	10				
RB1x31	$\phi_1+T_{12}+\delta_{15}N_{25}+AT_{10}$	A	1	0	0	0		1*	2*	3*	4*	5	6	7	12	13	14	15				
32			1.1					16*	17*	18*	19*	20	21	22	23	24	25	26				
33			1.25					27*	28*	29*	30*	31	32	33	34	35	36	37				
34	$+AT_{11}$	B	1.6						47		43		49		50		51					
35			1.75						56		55		54		53		52					
36			1.95						42		43		44		45		46					
37			2.5						57		58		59		60		61					
38			3.2						63		64		65		66		67					
39			3.5						68		67		70		71		72					
40			4						84		85		86		87		88					
41			4.2						149		148		147		146		145					
42			4.5						140		141		142		143		144					
43			4.8						135		136		137		138		139					
44			5.2						130		131		132		133		134					
45			5.5						125		126		127		128		129					
46			5.75						120		121		122		123		124					
47			6.0						115		116		117		118		119					
48			6.10						110		111		112		113		114					

1 7 13 19 25 31 37 43 49 55 61 67 75 76

α OR β SCHEDULES: (A) = -10 to +10, 2 [illegible]

(B) = -8, -4, 4

COEFFICENTS

IDVAR (1) IDVAR (2) NDV

TEST RUN NUMBERS

* FORCE DATA NOT AVAILABLE.

TABLE II - Concluded

TEST: TA14A — DATA SET/RUN NUMBER COLLATION SUMMARY — DATE: 13 Sept. 1973

DATA SET IDENTIFIER	CONFIGURATION	SCHD.	PARAMETERS/VALUES				NO. OF RUNS	ALPHA (OR ALTERNATE INDEPENDENT VARIABLE)					TEST RUN NUMBERS
		B	M					-8	-4	0	4	8	
RB1x49	$Z_1+T_2+S_{12}N_{25}$	B	1.15	0	0	0		105	106	107	108	109	
50	↓	↓	1.25					95	96	97	98	99	
51	↓	↓	1.40					100	101	102	103	104	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

α OR β SCHEDULES: $\beta(B) = -8, -4, 0, 4,$ — COEFFICENTS — IDVAR (1) IDVAR (2) NDV

TABLE III. - MODEL DIMENSIONAL DATA

MODEL COMPONENT: ATTACH STRUCTURE - AT_{10}

GENERAL DESCRIPTION: Attach structure for Integrated Vehicle Configuration 4 per VL72-000088B and VL72-000089, modified as follows: Removed ET-to-SRM aft attach struts (4) and left orbiter to right ET aft attach crossover rod.

MODEL SCALE: 0.030

DRAWING NO.: SEE DESCRIPTION

DIMENSIONS:	FULL SCALE	MODEL SCALE
FORWARD ATTACH		
Orbiter to Tank		
Number of struts	2	2
Diameter - In.	6.000	0.180
Location - In.		
X_o	382.000	11.460
X_T	1078.000	32.340
DRAG LINK ATTACH		
Orbiter to Tank		
Number of struts	2	2
Diameter, In.	15.000	0.450
Location, In.		
X_o	1307.000	39.210
X_T	1859.000	55.770
AFT ATTACH		
Orbiter to Tank		
Number of struts	2	2
Diameter - In.	12.000	0.360
Location - In.		
X_o	1307.000	39.210
X_T	2058.000	61.740
CROSSOVER ROD (RIGHT ORBITER TO LEFT ET)		
Diameter, In.	8.000	0.240
Location - In.		
X_o	1307.000	39.210
X_T	2058.000	61.740

TABLE III. - Continued.

MODEL COMPONENT: ATTACH STRUCTURE - AT_{11}

GENERAL DESCRIPTION: Attach structure, same as AT_{10} except the forward attach struts are rotated to the vertical, and the structure extends from the orbiter but is not attached to the tank.

MODEL SCALE: 0.030

DIMENSIONS:	FULL SCALE	MODEL SCALE
FORWARD ATTACH		
Orbiter to Tank		
Location - In.		
X_O	382.000	11.460
X_T	1133.000	33.990
Clearance, tank to strut - In.	16.667	0.500
DRAG LINK ATTACH		
Orbiter to Tank		
Clearance, tank to strut - In.	8.333	0.250
AFT ATTACH		
Orbiter to Tank		
Clearance, Tank to strut - In.	8.333	0.250
Crossover Rod		
Clearance, tank to strut - In.	8.333	0.250

TABLE III. - Continued.

MODEL COMPONENT: BODY - B_{26}

GENERAL DESCRIPTION: Orbiter Fuselage Configuration 140 A/B

NOTE: B_{26} identical to B_{24} except underside of fuselage refaired to accept W_{116}.

Model Scale = .030

DRAWING NUMBER: VL70-000193
VL70-000140A

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Length (Body Fwd Sta X_o = 238) - in.	1293.3	38.799
Max. Width (at X_o = 1520) - in.	262.0	7.860
Max. Depth (at X_o = 1464) - in.	250.0	7.500
Fineness Ratio	0.26357	0.26357
Area - ft^2		
Max. Cross-Sectional	340.88462	0.30679
Planform		
Wetted		
Base		

TABLE III. - Continued.

MODEL COMPONENT: CANOPY - C_9

GENERAL DESCRIPTION: Configuration 3A

Model Scale = .030

DRAWING NUMBER VL70-000140A
VL70-000143A

DIMENSION:	FULL SCALE	MODEL SCALE
Length (X_o=434.643 to 670)	235.357	7.06071
Max Width (@ X_o=513.127)	152.412	4.57236
Max Depth (@ X_o=485.0)	25.000	0.75000
Fineness Ratio		
Area		
Max Cross-Sectional		
Planform		
Wetted		
Base		

TABLE III. - Continued.

MODEL COMPONENT: ELEVON - E_{26}

GENERAL DESCRIPTION: Configuration 4

NOTE: VL70-000400 data for (1) of (2) sides. Identical to E_{25} except airfoil thickness

Model Scale = .030

DRAWING NUMBER: VL70-000 200
VL70-000140 B

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Area	223.5814	0.20122
Span (equivalent)	368.34	11.05020
Inb'd equivalent chord	119.623	3.58869
Outb'd equivalent chord	55.1922	1.65577
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	0.2096	0.2096
At Outb'd equiv. chord	0.4004	0.4004
Sweep Back Angles, degrees		
Leading Edge	0.00	0.00
Tailing Edge	-10.056	-10.056
Hingeline	0.00	0.00
Area Moment (Normal to hinge line)	851.1502	0.76604

TABLE III. - Continued.

MODEL COMPONENT: Body Flap - F_8

GENERAL DESCRIPTION: Configuration 4

Model Scale - .030

DRAWING NUMBER VL70-000140B, VL70-000200

DIMENSION:	FULL SCALE	MODEL SCALE
Length in.	84.7	2.541
Max Width in.	262.308	7.86924
Max Depth in.	23.000	0.69000
Fineness Ratio		
Area - ft^2		
Max Cross-Sectional		
Planform	158.85350	0.14297
Wetted		
Base	41.89642	0.03771

TABLE III. - Continued.

MODEL COMPONENT: OMS POD - M_7

GENERAL DESCRIPTION: Configuration 3A

Model Scale = .030

DRAWING NUMBER: VL70-000140A
VL70-000145

DIMENSION:	FULL SCALE	MODEL SCALE
Length (OMS Fwd Sta X_o=1233.0) - IN.	327.000	9.810
Max Width (@ X_o=1450.0) - IN.	94.5	2.8350
Max Depth (@ X_o=1493.0) - IN.	109.000	3.270
Fineness Ratio		
Area		
Max Cross-Sectional		
Planform		
Wetted		
Base		

TABLE III. - Continued.

MODEL COMPONENT: BSRM NOZZLES - N_{25}

GENERAL DESCRIPTION: Configuration 3A BSRM Nozzles

Model Scale = .030

DRAWING NO. VL72-000[illegible]
VL77-000036A

DIMENSIONS	**FULL-SCALE**	**MODEL SCALE**
MACH NO.		
DIAMETER DEX ~ IN (One Nozzle)	141.3	4.2390
DIAMETER DT ~ IN		
DIAMETER DIN ~ IN		
ON ~ DEGREES		
AREA - FT^2 (One Nozzle)		
MAX CROSS-SECTIONAL	108.89595	0.09801

GIMBAL ORIGIN	X_o	Y_o	Z_o
LEFT NOZZLE ~ IN. F.S.	1825.3	-243	400
RIGHT NOZZLE ~ IN. FS	1825.3	+243	400

NULL POSITION - DEG.	PITCH	YAW
LEFT NOZZLE	±8	±8
RIGHT NOZZLE	±8	±8

TABLE III. - Continued.

MODEL COMPONENT: NOZZLES - N_{28}

GENERAL DESCRIPTION: Configuration 3A OMS Nozzle

Model Scale = .030

DRAWING NO. VL70-000140A

DIMENSIONS	FULL-SCALE	MODEL SCALE
MACH NO.		
DIAMETER DEX ~ IN (One nozzle)		
DIAMETER DT ~ IN		
DIAMETER DIN ~ IN		
ON ~ DEGREES		
AREA - Ft^2 (one nozzle)		
MAX CROSS-SECTIONAL		

GIMBAL ORIGIN	X_o	Y_o	Z_o
LEFT NOZZLE ~ IN.	1518.0	-88.0	492.0
RIGHT NOZZLE ~ IN.	1518.0	+88.0	492.0

NULL POSITION	PITCH	YAW
LEFT NOZZLE (Null Pitch 15°49'; Yaw 12°17' OUTB'D)	±8°	13°17' OUTB'D 2°30' INB'D
RIGHT NOZZLE (Null Pitch 15°49': Yaw 12°17' OUTB'D)	±8°	13°17' OUTB'D 2°17' INB'D

TABLE III. - Continued.

MODEL COMPONENT: RUDDER - R5

GENERAL DESCRIPTION: 2A, 3 and 3A Configuration per Rockwell Lines VL70-000095

Model Scale = .030

DRAWING NUMBER: VL70-000095

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Area - FT^2	106.38	0.09574
Span (equivalent) - IN.	201.0	6.0300
Inb'd equivalent chord	91.585	2.74755
Outb'd equivalent chord	50.833	1.52499
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	0.400	0.400
At Outb'd equiv. chord	0.400	0.400
Sweep Back Angles, degrees		
Leading Edge	34.83	34.83
Tailing Edge	26.25	26.25
Hingeline	34.83	34.83
Area Moment (Normal to hinge line) - FT^3 Product of Area and Mean Chord	526.13	0.01420

TABLE III. - Continued.

MODEL COMPONENT: BOOSTER SOLID ROCKET MOTOR - S_{12}

GENERAL DESCRIPTION: Configuration 3A, Data for (1) of (2) sides, per Rockwell Lines VL77-000036A

Model Scale = .030

DRAWING NUMBER: VL72-000088A, VL77-000036A

DIMENSION:	FULL SCALE	MODEL SCALE
Length (Includes Nozzle) - IN.	1741.0	52.2300
Max Width (Tank Dia) - IN.	142.3	4.2690
Max Depth (Aft Shroud) - IN.	192.0	5.7600
Fineness Ratio	9.06771	9.06771
Area - FT^2		
Max Cross-Sectional	201.06193	0.18096
Planform		
Wetted		
Base		
WP of BSRM Centerline (Z_T) - IN.	400	12.000
FS of BSRM Nose (X_T) - IN.	200	6.000

TABLE III. - Continued.

MODEL COMPONENT: EXTERNAL TANK - T12

GENERAL DESCRIPTION: External Oxygen Hydrogen Tank

NOTE: Identical to T11 with external fuel lines added

Model Scale = .030

DRAWING NUMBER VL78-000031A
VL78-000041A

DIMENSION:	FULL SCALE	MODEL SCALE
Length - IN. (Nose @ X_T = 309)	1865	57.629
Max Width (Dia) - IN.	324	9.72
Max Depth		
Fineness Ratio	5.75617	5.75617
Area - FT^2		
Max Cross- ectional	572.555	17.177
Planform		
Wetted		
Base		
WP of Tank Centerline (X_T) - IN.	400.0	

TABLE III. - Continued.

MODEL COMPONENT: VERTICAL - V_8

GENERAL DESCRIPTION: Configuration 3A

NOTE: Similar to V5 with radius on TE upper corner and LE lower corner where vertical meets fuselage.

Model Scale = .030

DRAWING NUMBER: VL70-000140A
VL70-000146A

DIMENSIONS:	FULL-SCALE	MODEL SCALE
TOTAL DATA		
Area (Theo) Ft^2	413.253	0.37193
Planform		
Span (Theo) In	315.720	9.47160
Aspect Ratio	1.675	1.675
Rate of Taper	0.507	0.507
Taper Ratio	0.40399	0.40399
Sweep Back Angles, degrees		
Leading Edge	45.00	45.00
Trailing Edge	25.947	25.947
0.25 Element Line	41.130	41.1300
Chords:		
Root (Theo) WP	268.500	8.05500
Tip (Theo) WP	108.470	3.25410
MAC	199.80756	5.99423
Fus. Sta. of .25 MAC	1463.50	43.9050
W. P. of .25 MAC	635.522	19.06566
B. L. of .25 MAC	0.00	0.00
Airfoil Section		
Leading Wedge Angle Deg	10.00	10.00
Trailing Wedge Angle Deg	14.920	14.920
Leading Edge Radius (Min) - IN.	2.00	0.060
Void Area	13.17	0.01185
Blanketed Area	0.00	0.00

TABLE III. - Concluded.

MODEL COMPONENT: WING-W_{116}

GENERAL DESCRIPTION: Configuration 4

NOTE: Identical to W_{114} except airfoil thickness. Dihedral angle is along trailing edge of wing.

Model Scale = .030

TEST NO.

DWG. NO. VL70-000140B VL70-000200

DIMENSIONS:	FULL-SCALE	MODEL SCALE
TOTAL DATA		
Area (Theo.) Ft^2 Planform	2690.00	2.4210
Span (Theo In.	936.6816	28.10045
Aspect Ratio	2.265	2.265
Rate of Taper	1.177	1.177
Taper Ratio	0.200	0.200
Dihedral Angle, degrees(at X_o=1506.623,Y_o=	3.500	3.500
Incidence Angle, degrees 105, Z_o= 282.75)	0.500	0.500
Aerodynamic Twist, degrees	+3.000	+3.000
Sweep Back Angles, degrees		
Leading Edge	45.00	45.00
Trailing Edge	-10.056	-10.056
0.25 Element Line	35.209	35.209
Chords:		
Root (Theo) B.P.0.0.	689.2429	20.67729
Tip, (Theo) B.P.	137.8486	4.13546
MAC	474.8117	14.24435
Fus. Sta. of .25 MAC	1126.721	33.80163
W.P. of .25 MAC	291.00	8.73000
B.L. of .25 MAC	187.33491	5.62005
EXPOSED DATA		
Area (Theo) Ft^2	1812.2205	1.63010
Span, (Theo) In. BP108	736.6816	22.10045
Aspect Ratio	2.058	2.058
Taper Ratio	0.2451	0.2451
Chords		
Root BP108	570.6230	17.11869
Tip 1.00 $\frac{b}{2}$	137.8512	4.13554
MAC	354.2376	10.62713
Fus. Sta. of .25 MAC	1164.237	34.92711
W.P. of .25 MAC	292.00	8.76000
B.L. of .25 MAC	239.67786	7.19034
Airfoil Section (Rockwell Mod NASA XXXX-64		
Root $\frac{b}{2}$ = 0.425	0.113	0.113
Tip $\frac{b}{2}$ = 1.00	0.12	0.12
Data for (1) of (2) Sides		
Leading Edge Cuff Planform Area Ft^2	118.333	0.10650
Leading Edge Intersects Fus M. L. @ Sta	505.0	15.15000
Leading Edge Intersects Wing @ Sta	1003.5	30.10500

TABLE IV. - ORBITER FUSELAGE PRESSURE ORIFICE LOCATIONS

	ORBITER X_o IN.			RADIAL LOCATION Ø DEGREES																		
	FULL	MODEL	Xo/lo	o	20	40	55	70	90	105	110	120	135	140	150	151	156	162	165	169	174	180
	235	7.05	0	6																		
	245	7.35	.008	7					8													9
	265	7.95	.023	10	11	12	13	14	15			16			17							18
	295	8.85	.047	19	20	21	22	23	24			25			26							27
	325	9.75	.070	28	29	30	31	32	33			34			35							36
	380	11.40	.112	37	38	39	40	41	42			43			44							45
	440	13.20	.159																		46	
	450	13.50	.167	47	48	49	50	51	52			53					54			55		56
	465	13.95	.178													57		58				
	500	15.00	.205	59	60	61	62	63	64			65		66	67				68			69
	560	16.80	.252	70		71		72	73			74			75				76			77
	625	18.75	.301	78		79		80	81			82			83				84			85
	725	21.75	.379	86		87		88	89			90			91				92			93
	880	26.40	.499	94		95		96	97			98			99				100			101
	980	29.40	.576	102		103																
	1080	32.40	.653	104		105		106	107			108			109				110			111
	1180	35.40	.730	112		113		114	115			116			117							118
	1245	37.35	.781	119		120		121	122	123		124	125		126				127			128
	1300	39.00	.823	129		130		131	132	133		134	135		136							137
	1375	41.25	.882	138		139		140	141	142		143	144		145				146			
	1430	42.90	.925	147		148		149	150	151		152	153		154				155			
	1480	44.40	.963	156		157		158	159	160		161	162		163				164			
a	1530	45.90	1.002								165	166										
b	1530	45.90	1.002								167	168										
	1555	46.65	1.021	169		170																
c	1590	47.70	1.048	171		172																
d	1590	47.70	1.048	173		174																

ℓo = 1293.3 full scale

ℓ_o = 38.799 model

a: OMS pod, inside

b: OMS pod, outside

c: Body flap lower surface

d: Body flap upper surface

data in datasets RB1BXX

TABLE V. - ORBITER WING PRESSURE ORIFICE LOCATIONS

ORBITER WING

| ORBITER B.P.-Y_o | | | X/C ~ LOCAL WING CHORD | | |

TABLE VI. - ORBITER VERTICAL TAIL PRESSURE ORIFICE LOCATIONS

ORBITER VERTICAL TAIL

VERTICAL $W_L \sim Z_o$				X/C_V								
FULL	MODEL	η_V		0	.025	.05	.15	.30	.52	.685	.775	.90
550	16.50	.158	RH LE LH	316	317	324 318	325 319	326 320	327 321	328 322	329 323	
600	18.00	.316	RH LE LH	330	331	339 332	340 333	341 334	342 335	343 336	344 337	345 338
690	20.70	.600	RH LE LH	346	347	355 348	356 349	357 350	358 351	359 352	360 353	361 354
765	22.95	.840	RH LE LH	362	363	371 364	372 365	373 366	374 367	375 368	376 369	377 370
792	23.76	.925	RH LE LH	378	379	387 380	388 381	389 382	390 383	391 384	392 385	393 386

data in datasets RB1VXX (left side) and RB1RXX (right side)

TABLE VII. - ORBITER BASE, BODYFLAP, AND OMS NOZZLE PRESSURE ORIFICE LOCATIONS

ORBITER BASE

LOCATION	ORIFICE NUMBER
Orbiter Sting Cavity	1
Orbiter Base (Lower Left Corner)	2
OMS Nozzle Base	3

data in datasets RB1CXX

RUDDER FLARE BASE

RUDDER $W_L \sim Z_o$		X/C_V
FULL	MODEL	.75
725	18.75	4
625	21.75	5

data in datasets RB1CXX

BODY FLAP

ORBITER $\sim X_o$		$\emptyset \sim$ Deg	
FULL	MODEL	0	40
1555	46.65	169	170
1590	47.70	Upper 173	174
1590	47.70	Lower 171	172

data in datasets RB1FXX

LEFT OMS NOZZLE SURFACE

$X \sim$ IN. FWD. NOZZLE EXIT		$\emptyset \sim$ DEG.		
FULL	MODEL	135	180	225
10	.30	175	176	177
20	.60		178	

data in datasets RB1EXX

TABLE VIII. - EXTERNAL TANK PRESSURE ORIFICE LOCATIONS

EXTERNAL TANK

TANK STATION $\sim X_T$			$\emptyset\sim$ DEG.									
FULL SCALE	MODEL SCALE	$\frac{X_T}{\ell_T}$	0	30	60	90	120	135	150	165	180	270
309	9.27	0	503									
324	9.72	.008	504			505					506	507
400	12.00	.049	508	509	510	511	512		513		514	
520	15.60	.113	515	516	517	518	519		520	521	522	
640	19.20	.178	523	524	525	526	527		528	529	530	
670	20.10	.194	531	532	533	534	535		536	537	538	
710	21.30	.215	539	540	541	542	543		544	545	546	
760	22.80	.242	547	548	549	550	551	552	553	554	555	
850	25.50	.290	556	557	558	559	560		561	562	563	564
950	28.50	.344	565	566	567		568	569	570	571	572	
1050	31.30	.394	573	574	575	576	577		578	579	580	
1150	34.50	.451	581	582	583	584	585	586	587	588	589	
1250	37.50	.505	590	591	592	593	594		595	596	597	
1350	40.50	.558	598	599	600	601	602	603	604	605	606	
1500	45.00	.638	607	608	609	610	611		612	613	614	
1700	51.00	.746	615	616	617	618	619	620	621	622	623	
1900	57.00	.853	624	625	626	627	628	629	630	631	632	
2040	61.20	.928	633	634	635		636	637	638	639	640	
TANK BASE STING CAVITY			501								502	

ℓ_T = 1865 IN. FULL SCALE
55.950 IN. MODEL SCALE

data in datasets RB11XX

TABLE IX. - SRM PRESSURE ORIFICE LOCATIONS

LEFT SRM

SRM STATION ~ X_s			ø ~ DEG.							
FULL SCALE	MODEL SCALE	$\frac{X_s}{\ell_s}$	0	45	90	135	180	225	270	315
200	6.00	0	805							
260	7.80	.034	806	807	808	809	810	811	812	813
370	11.10	.098	814	815	816	817	818	819	820	821
400	12.00	.115	822	823	824	825	826	827		828
450	13.50	.144	829	830	831	832	833	834	835	836
550	16.50	.201	837	838	839	840	841	842	843	844
700	21.00	.287	845		846		847	848	849	850
850	25.50	.373	851		852		853		854	
1050	31.50	.488	855		856		857			
1250	37.50	.603	858		859		860			
1450	43.50	.718	861		862		863		864	
1650	49.50	.833	865		866		867		868	
1750	52.50	.890	869	870	871	872	873	874	875	876
1796	53.88	.917	877	878	879	880	881	882	883	884
1835	55.05	.939	885	886	887	888	889	890	891	892
1868	56.04	.958	893	894	895	896	897	898	899	900
SKIRT BASE			802			803		804		
NOZZLE BASE			801							
NOZZLE EXTERNAL PRESSURES										
1850	55.50	.948	901	902	903	904	905	906	907	908
1905	57.15	.979	909	910	911	912	913	914	915	916
1928	57.84	.993	917	918	919	920	921	922	923	924

ℓ_s = 1741 IN. FULL SCALE
52.53 IN. MODEL SCALE

data in datasets RB1SXX

TABLE X. - ORBITER ATTACH POINT PRESSURE ORIFICE LOCATIONS

		ORBITER ATTACH POINT ORIFICE LOCATIONS															
	X_o FULL SCALE	347	357	367	377	387	397	407	1252	1262	1272	1282	1292	1302	1312	1322	1332
	X_o MODEL	10.41	10.71	11.01	11.31	11.61	11.91	12.21	37.56	37.86	38.16	38.46	38.76	39.06	39.36	39.96	40.26
	X_o/L_o	.087	.095	.102	.110	.118	.126	.133	.788	.796	.804	.811	.819	.827	.835	.850	.858
η	F.S. Y_o MODEL Y_o	394	397					412				436	447		468	474	480
.021	10 .30		396	399	403	407	411	415				435	446	457	467	473	479
.043	20 .60		395	398	402	406	410	414				434	445	456	466	472	478
.064	30 .90				401	405	409	413				433	444	455	465	471	477
.085	40 1.20											432	443	454	464	470	476
.107	50 1.50															469	475
.149	69.75 2.09											431	442	453	463		
.170	79.75 2.39										424	430	441	452	462		
.192	89.75 2.69									419	423	429	440	451	461		
.213	99.75 2.99								416	418	422	428					
.2[illegible]	109.75 3.29									417	421	427	439	450	460		
.256	119.75 3.59										420	426	438	449	459		
.277	129.75 3.89											425	437	448	458		

data in datasets RB11XX

TABLE XI. - EXTERNAL TANK ATTACH POINT PRESSURE ORIFICE LOCATIONS

X_T Full Scale	1103	1093	1083	1073	1063	1053	1043	
X_T Model Scale	33.09	32.79	32.49	32.19	31.89	31.59	31.29	
X_T/l_T	.424	.419	.413	.408	.402	.397	.391	
								ø DEG.
FWD ATTACH POINT (ORBITER TO E-T)	684	676	668	660				182.84
	685	677	669	661				186.38
	686	678	670	662	655			189.92
	687	679	671	663	656	652		193.46
	688	[illegible]			657	653	651	197.0
	689	681	673	665	658	654		200.54
	690	682	674	666	659			204.08
	691	683	675	667				207.62

data in datasets RB12XX

TABLE XI. - EXTERNAL TANK ATTACH POINT PRESSURE ORIFICE LOCATIONS

(CONTINUED)

	X_T FULL SCALE	1874	1864	1854	1844	1834	1824	1814	
	X_T MODEL SCALE	56.22	55.92	55.62	55.32	55.02	54.72	54.42	
	X_T/ℓ_T	.839	.834	.828	.823	.818	.812	.807	
									$\emptyset \sim$ DEG.
		719	713	707					222.84
FWD DRAG LINK ATTACH POINT		720	714	708	701				226.38
		721	715	709	702	696			229.92
		722		710	703	697	693		233.46
					704	698	694	692	237.00
						699	695		240.54
		723	718	712	706	700			244.08

data in datasets RB12XX

TABLE XI. - EXTERNAL TANK ATTACH POINT PRESSURE ORIFICE LOCATIONS

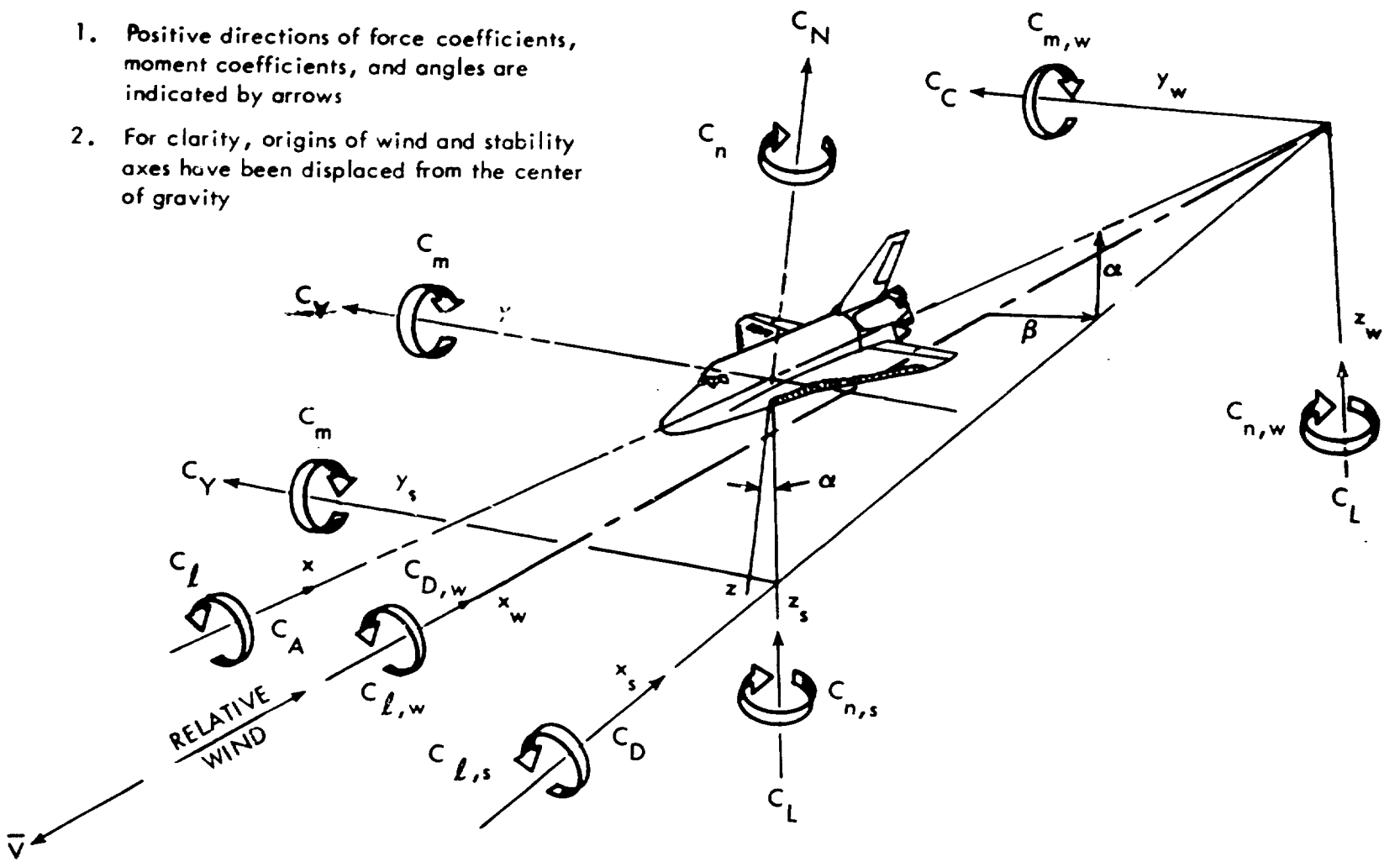
(CONCLUDED)

	X_T FULL SCALE	2078	2068	2058	2048	2038	2028	2018	
	X_T MODEL SCALE	62.34	62.04	61.74	61.44	61.14	60.84	60.54	
	X_T/ℓ_T	.948	.943	.938	.932	.927	.921	.916	
									$\emptyset \sim$ DEG.
AFT UPPER ATTACH		777	766	754					234.04
		778	767	755	742				237.58
		779	768	756	743	732			241.12
		780	769		744	733	726		244.66
		781	770		745	734	727	724	248.2
					746	735	728		251.74
			771	759	747	736			255.28
AFT LOWER ATTACH		782	772	760					323.51
		783	773	761	748				327.05
		784	774	762	749	737			330.59
		785	775		750	738	729		334.13
		786	776		751	739	730	725	337.67
					752	740	731		341.21
				765	753	741			344.75

data in datasets RB12XX

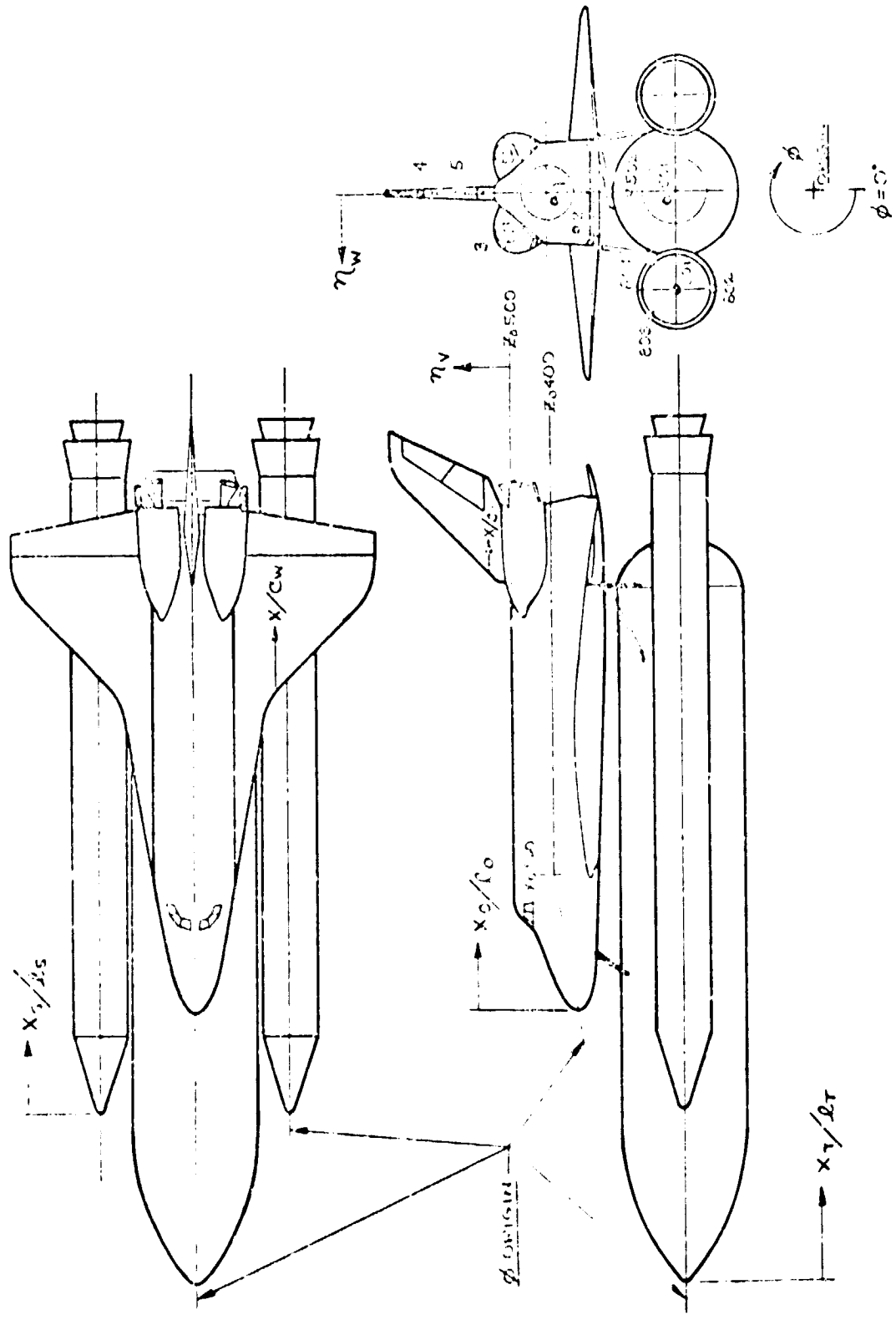
Notes:

1. Positive directions of force coefficients, moment coefficients, and angles are indicated by arrows
2. For clarity, origins of wind and stability axes have been displaced from the center of gravity



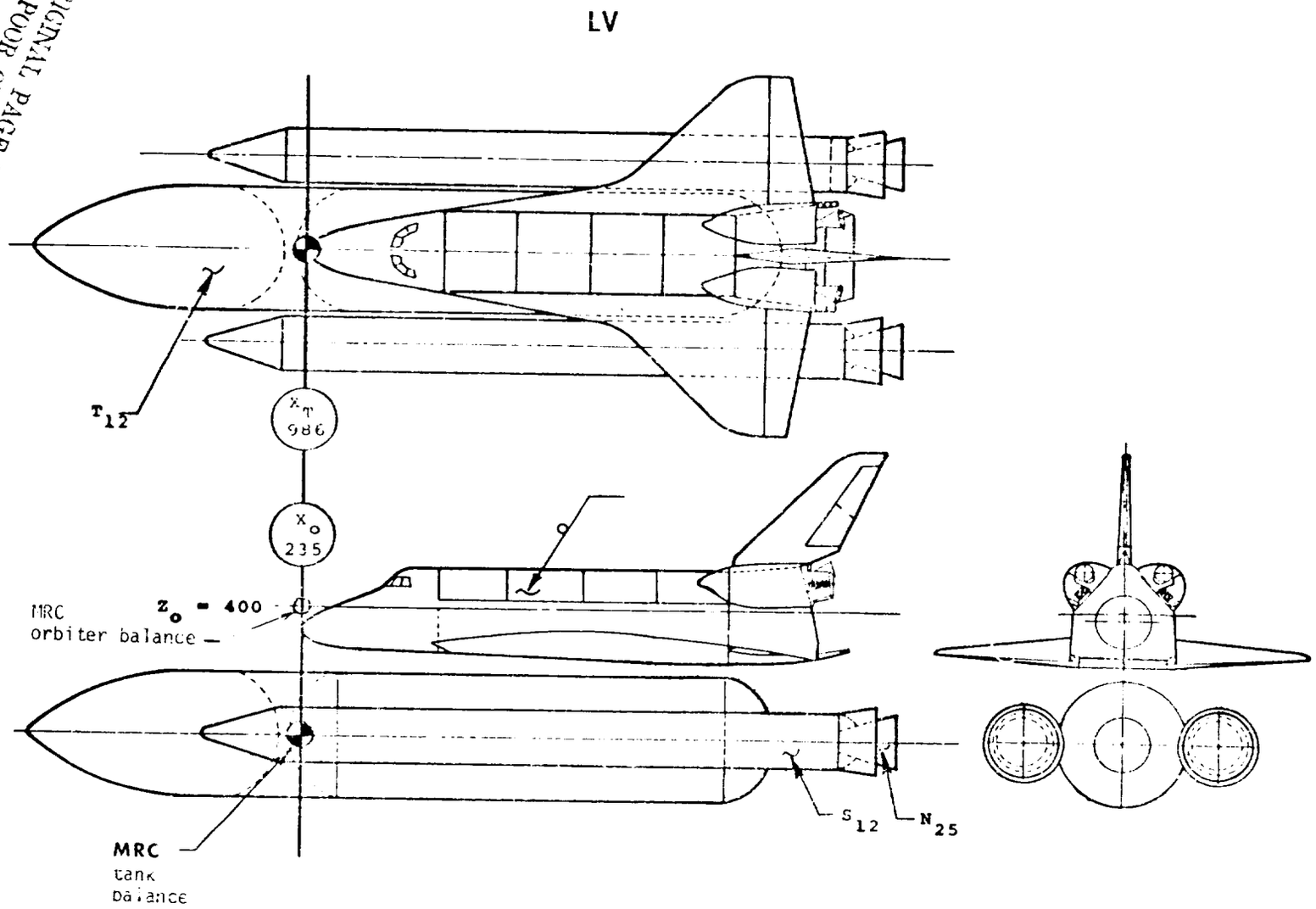
a. Stability and body axis systems

Figure 1. - Axis Systems



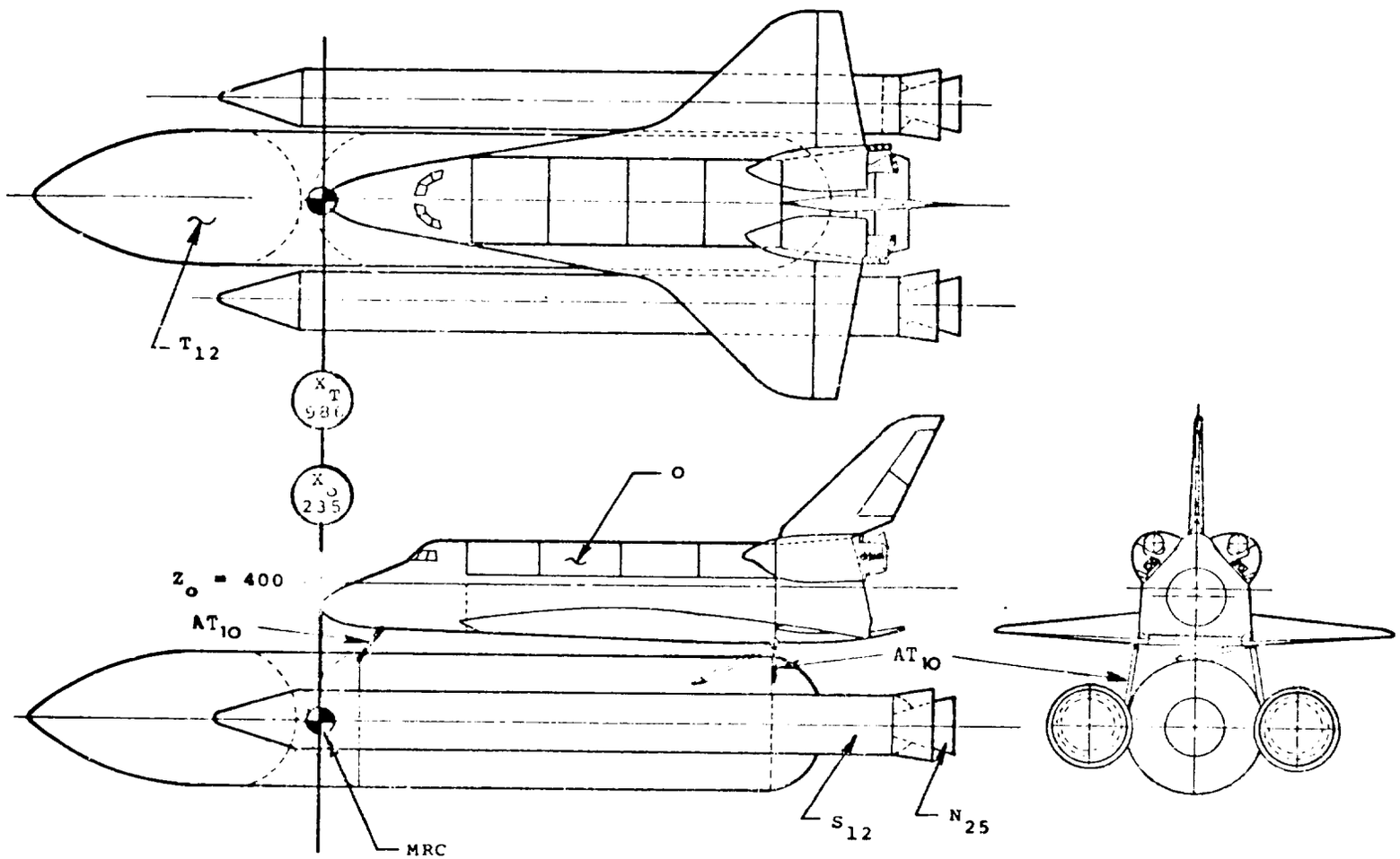
b. Orifice location nomenclature diagram

Figure 1. - Concluded



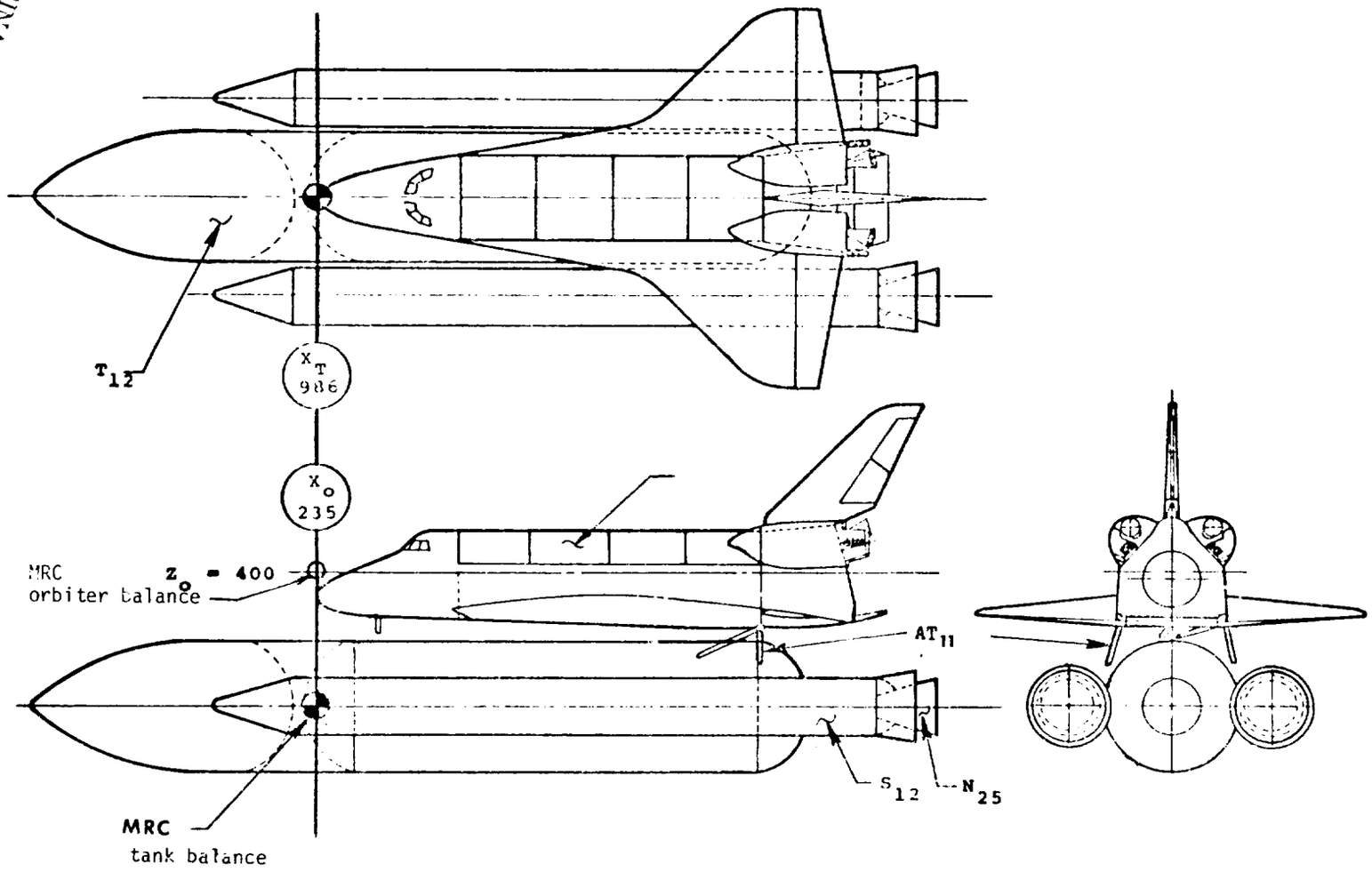
a. Integrated vehicle - 2 balances, no attach structure

Figure 2. - Model Sketches



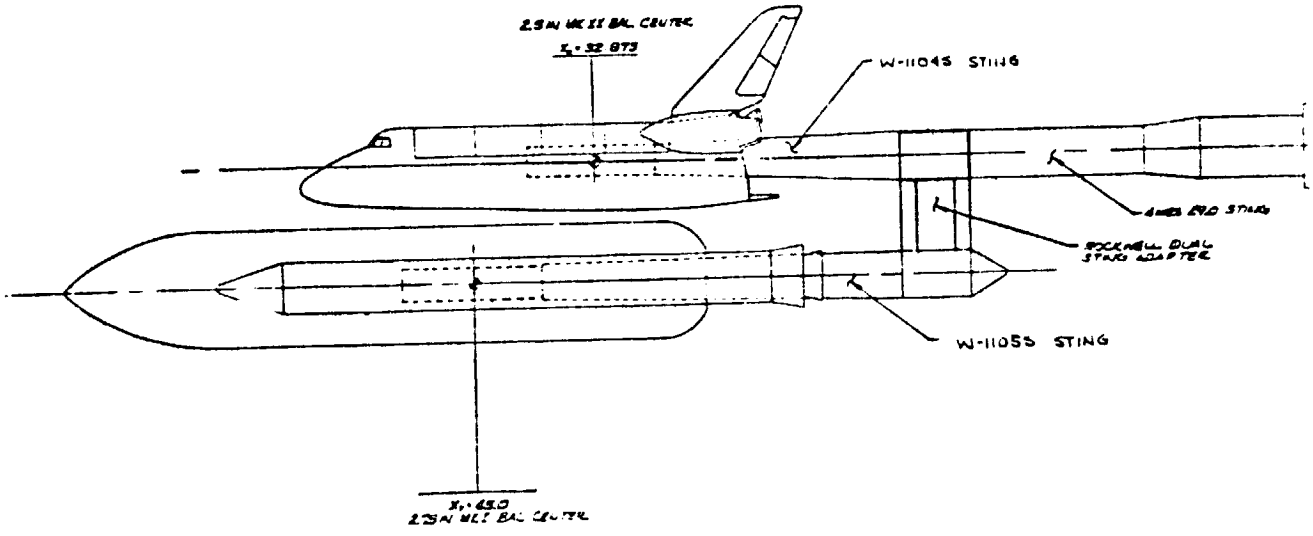
b. Integrated vehicle - 1 balance with attach structure

Figure 2. - Continued

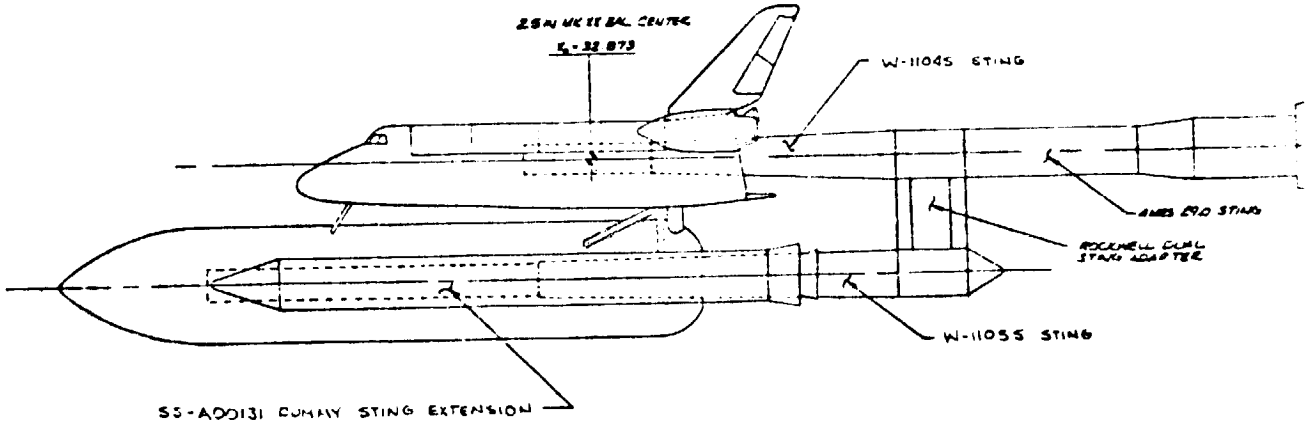


c. Integrated vehicle - 2 balances with attach structure

Figure 2. - Continued



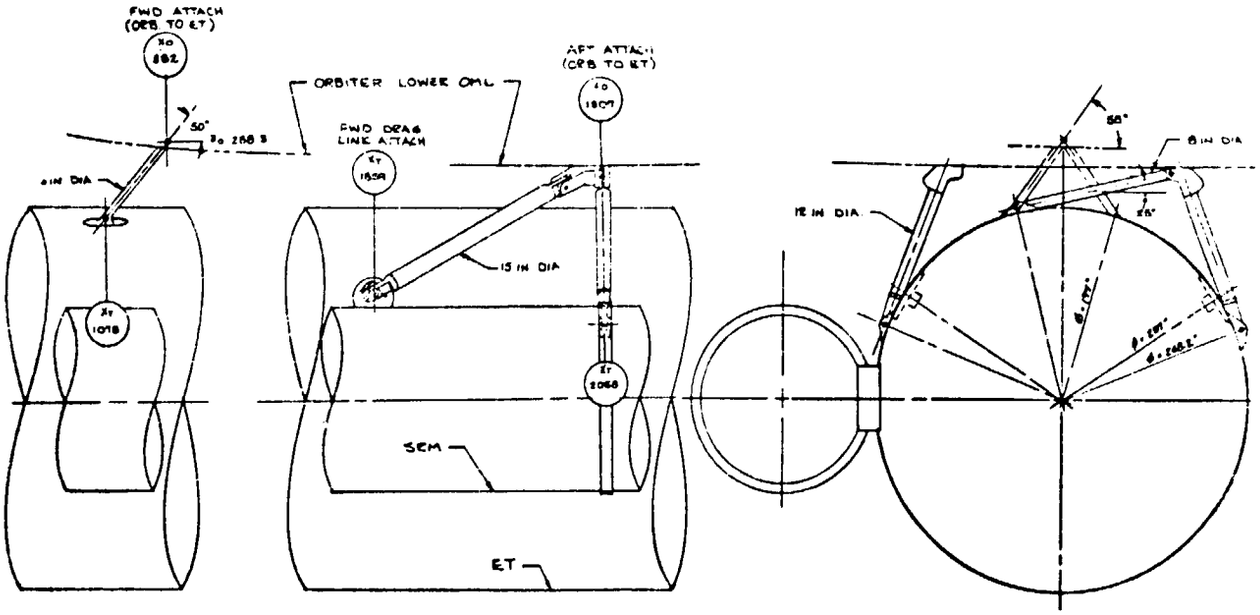
DUAL BALANCE CONFIGURATION ~ LV & LVAP



SINGLE BALANCE CONFIGURATION ~ LVA

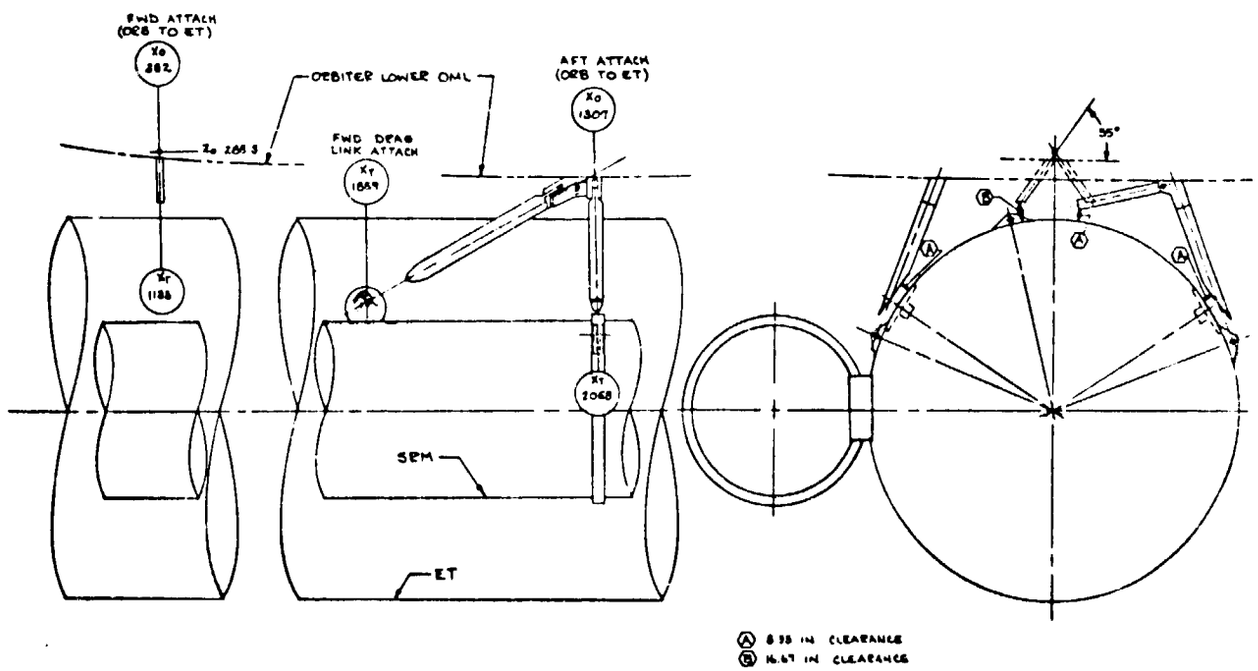
d. Installation side views

Figure 2. - Continued



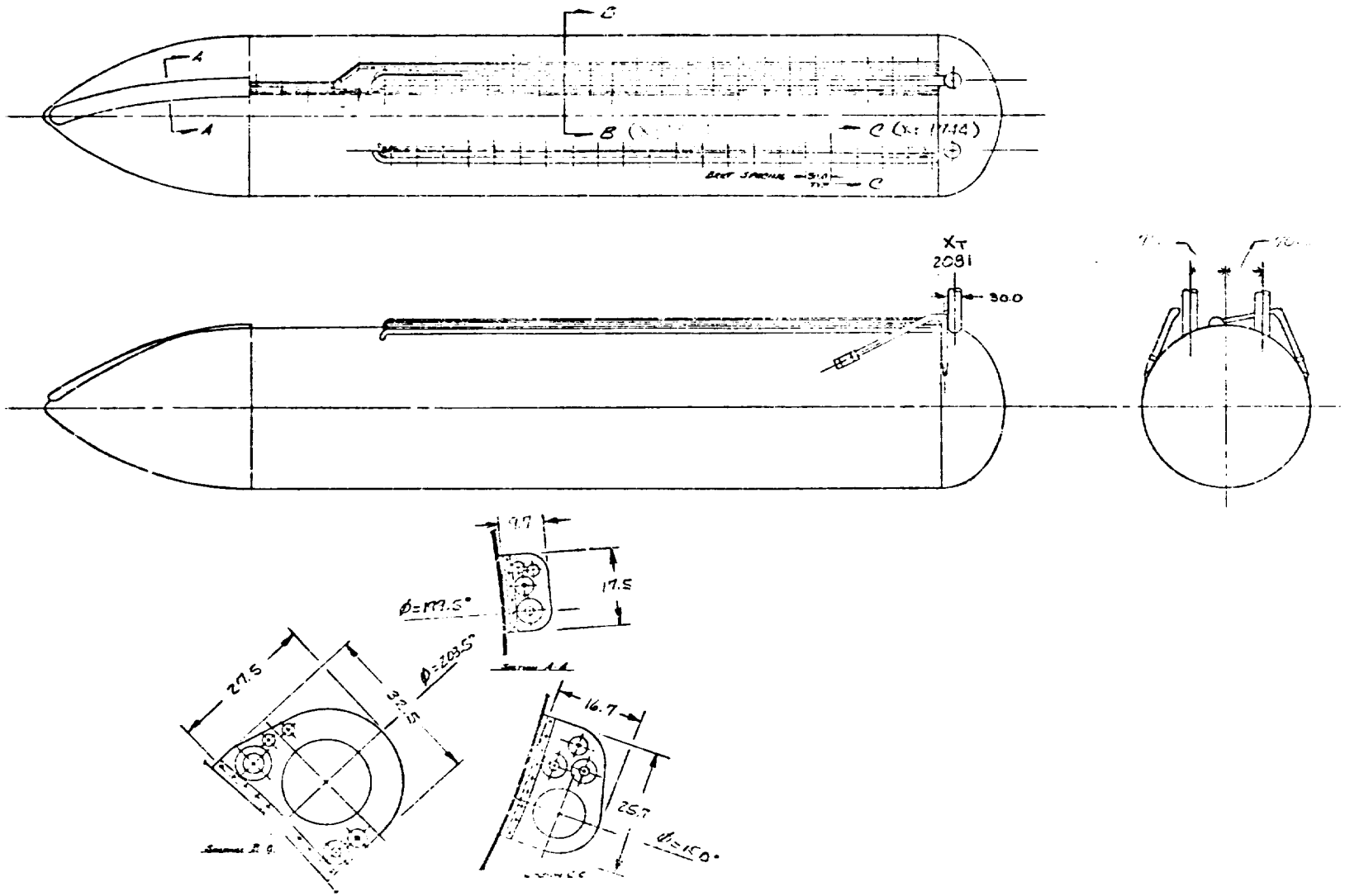
ATTACH HARDWARE CONFIGURATION — AT10

ATTACH HARDWARE CONFIGURATION — AT11



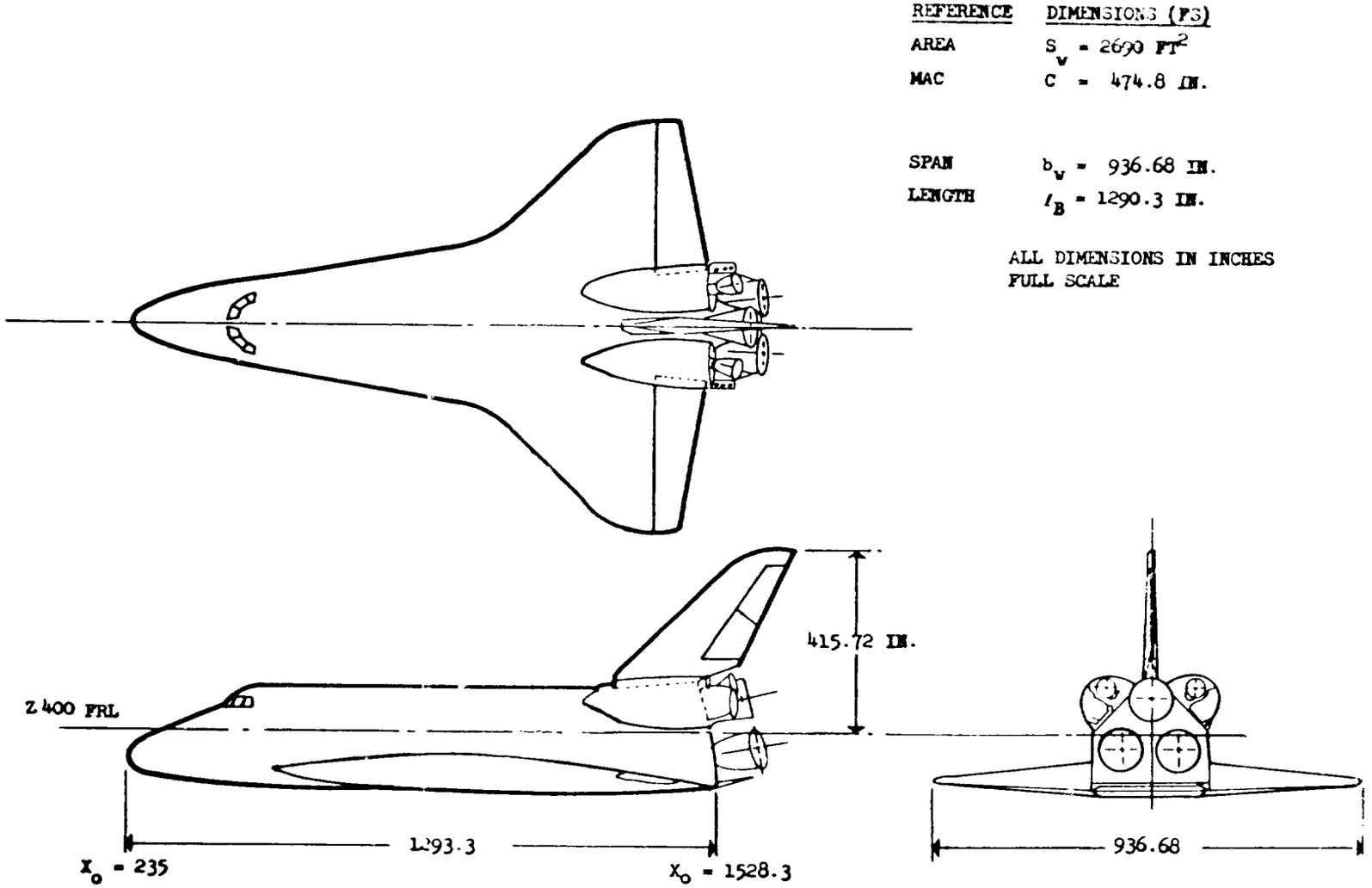
e. Attach hardware

Figure 2. Continued



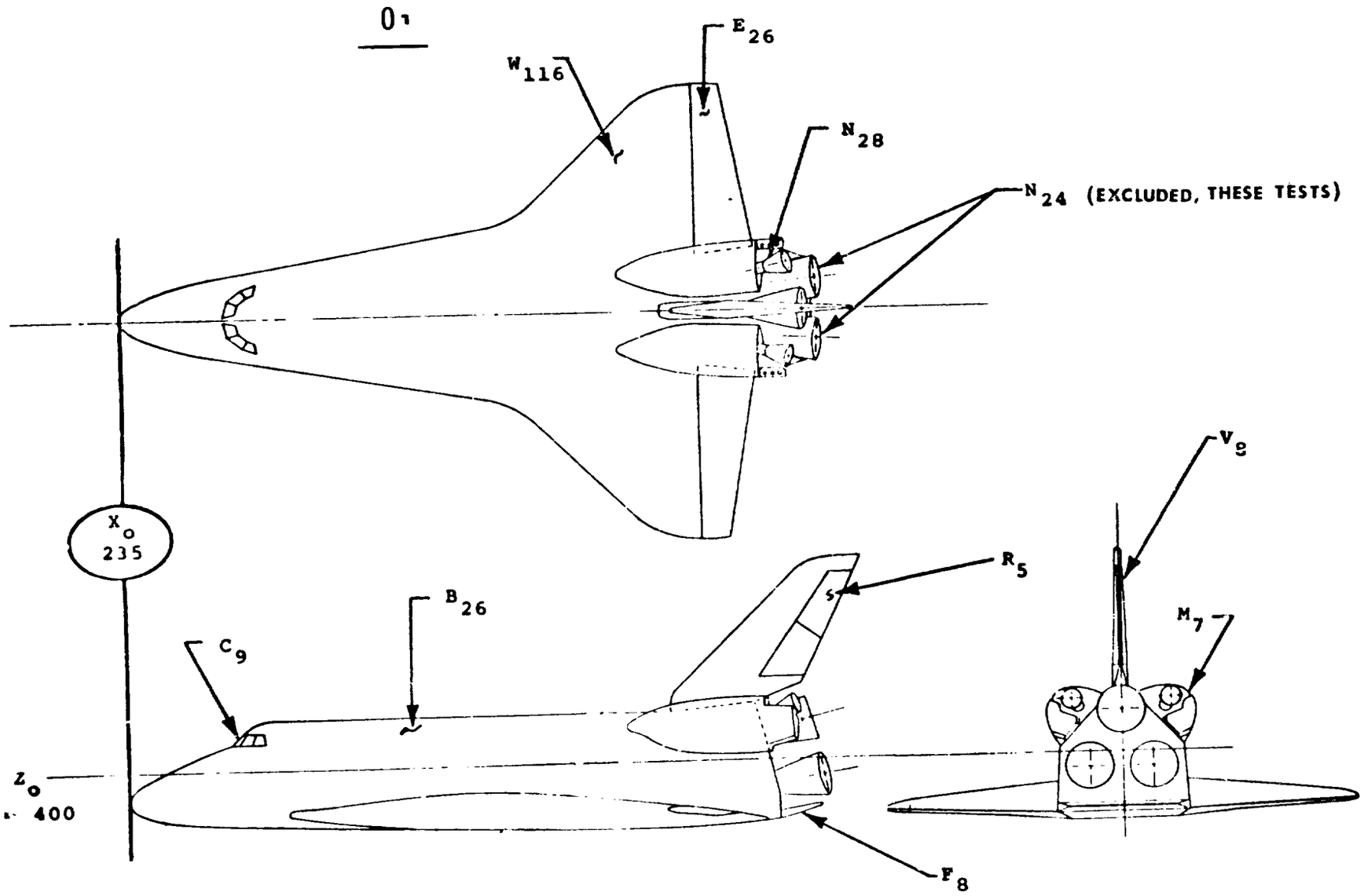
f. External tank protuberances

Figure 2. - Continued



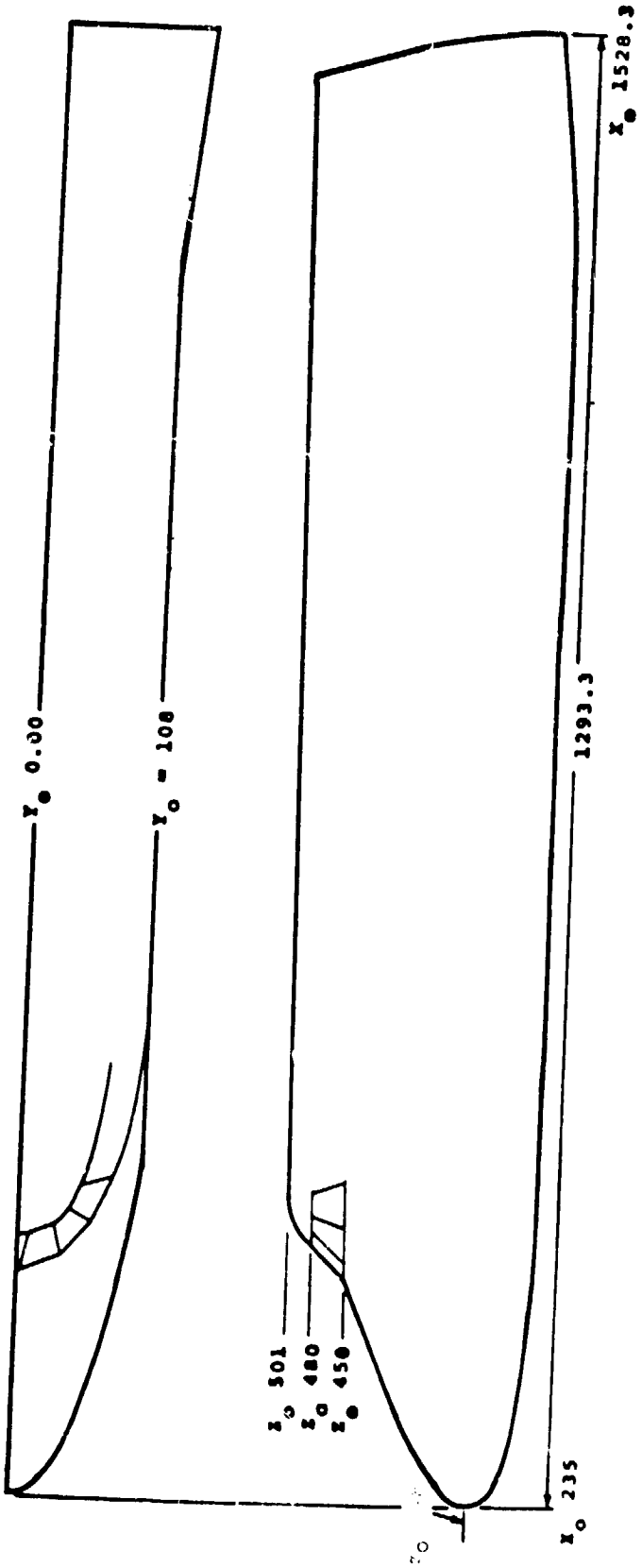
g. SSV orbiter configuration 140A/B

Figure 2. - Continued



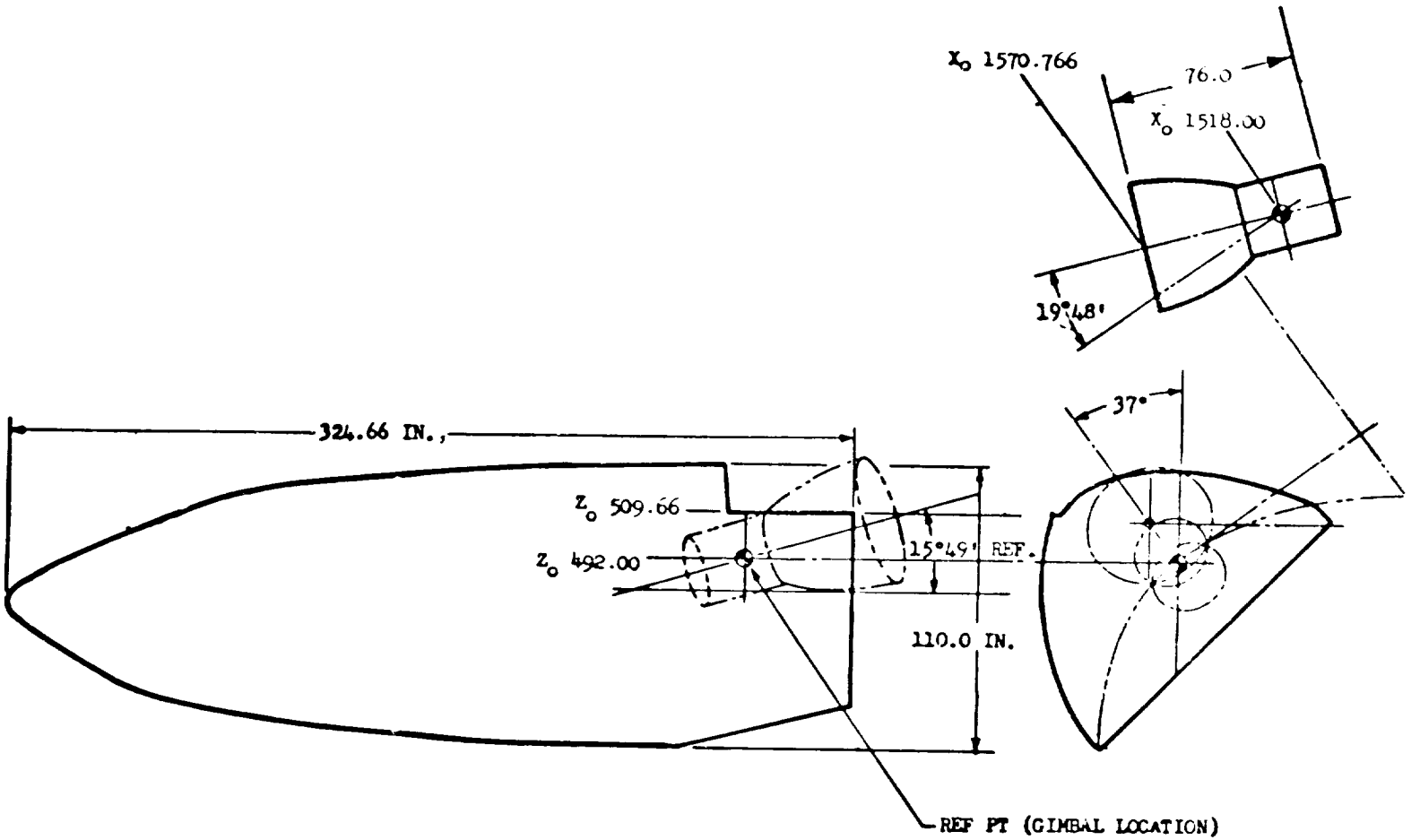
h. Orbiter nomenclature

Figure 2. - Continued



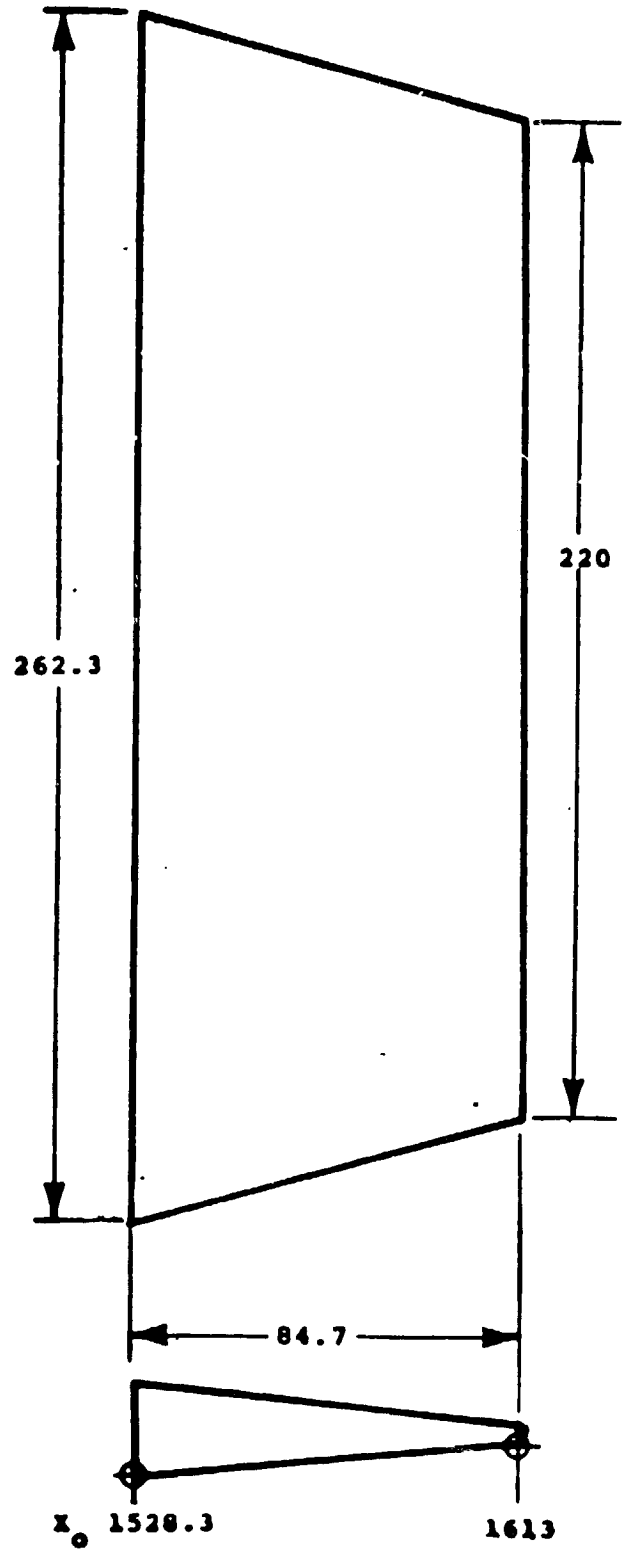
i. Canopy, C_g, and body, B_{26}, lines drawing VL70-00193 and VL70-000140A/B

Figure 2. - Continued



j. M_7 - OMS Pod

Figure 2. - Continued

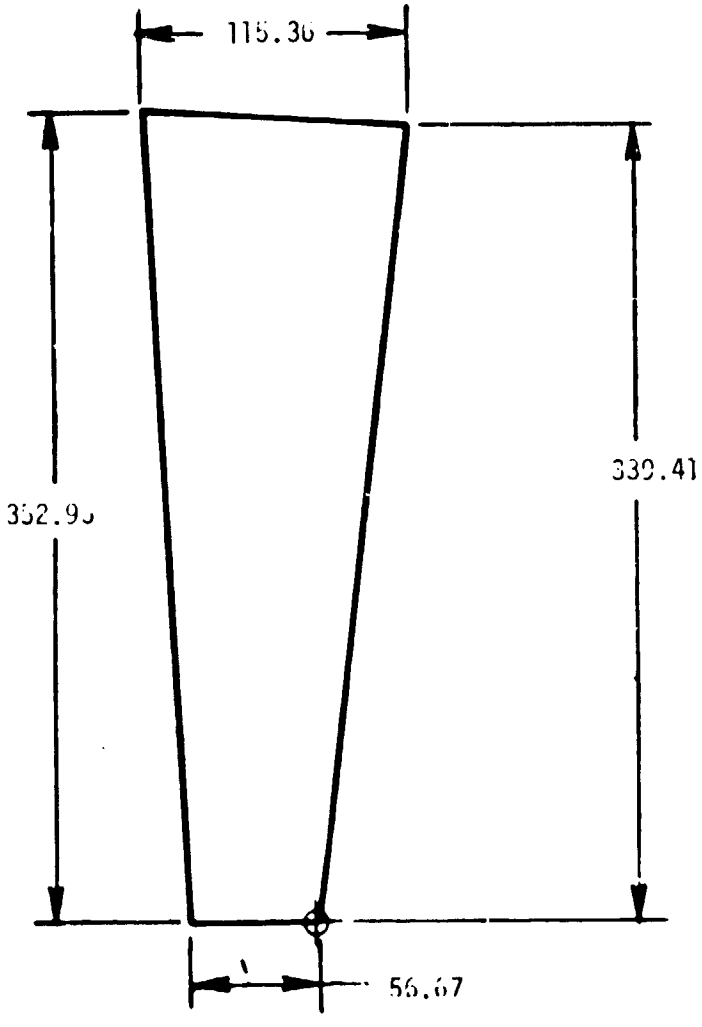


k. Body flap, F_8, lines drawing no. VL70-000140A/B

Figure 2. - Continued

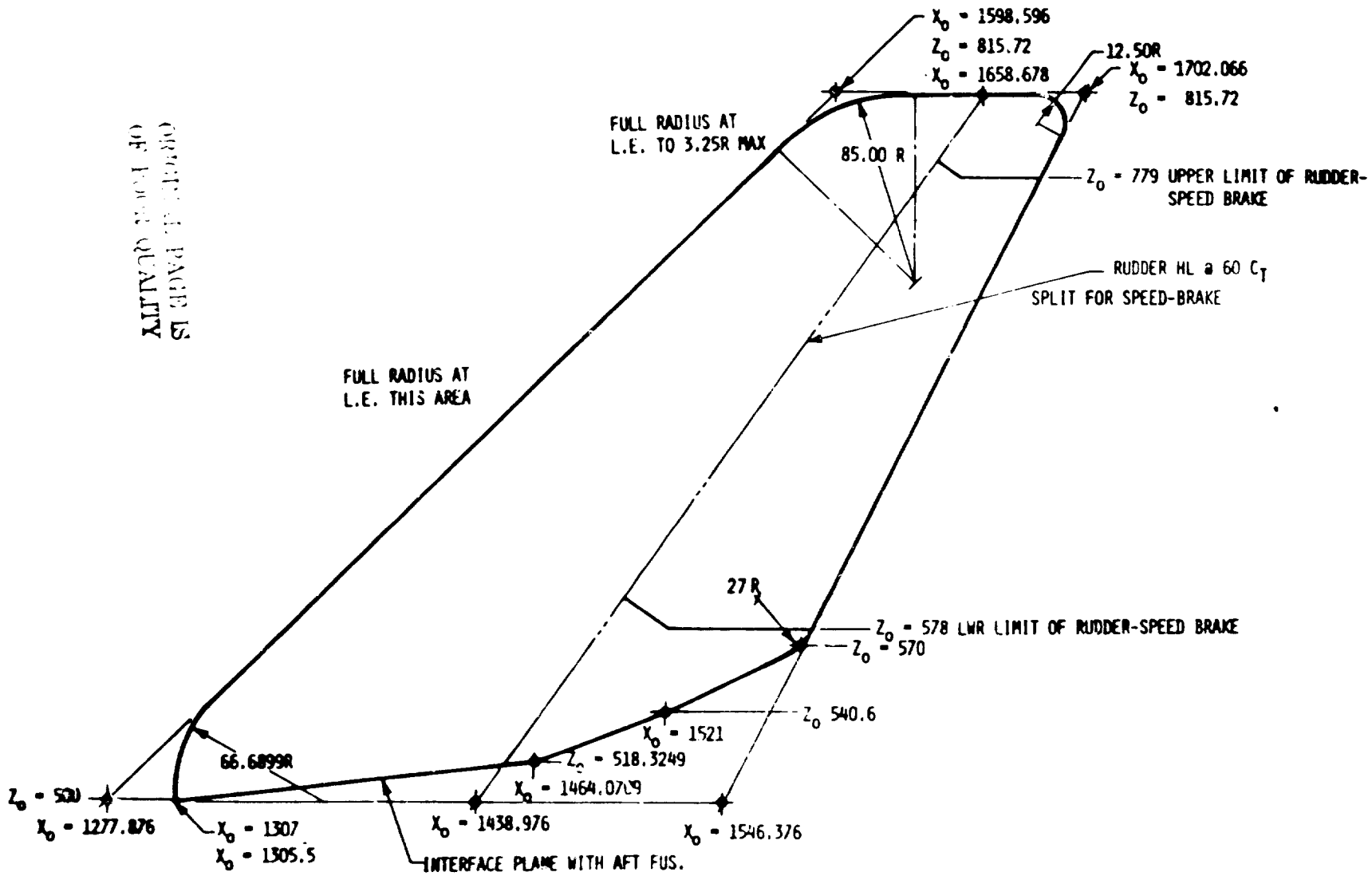
1. Wing, W_{116}, lines drawing no. VL70-000200

Figure 2. - Continued



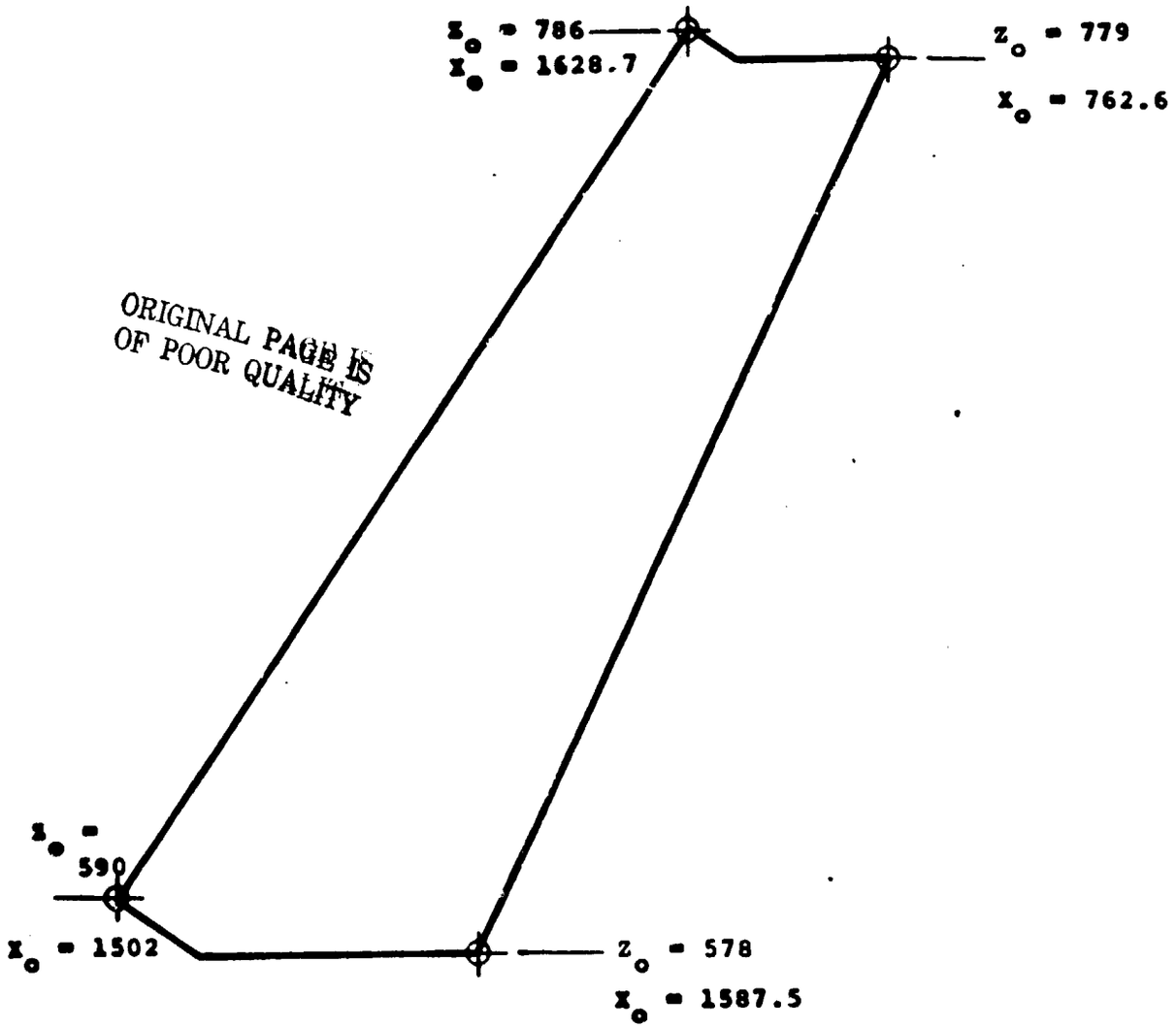
m. Elevon, E_{26}, lines drawing no. VL70-000200, VL70-000140A/B

Figure 2. - Continued



n. Vertical tail, V_8, and rudder, R_8, lines drawing no. VL70-000146A

Figure 2. - Continued



o. Rudder, R_5, lines drawing no. VL70-000095

Figure 2. - Concluded

a. Front view of model installed in tunnel

Figure 3. - Model photographs.

b. Rear view of model installed in tunnel

Figure 3. - Concluded.

TABULATED PRESSURE DATA

AR211-716 IA14 01+T12+S12N25+AT11 EXTERNAL TANK (RB1T17) (03 OCT 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES
LREF = 36.7090 INCHES YMRP = .0000 INCHES
BREF = 36.7090 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

BETAO = .000 ELEVON = .000
RUDDER = .000 SPDBRK = .000

MACH (1) = .898 ALPHAO(1) = -8.170

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0400	.6062	.1715	-.3361	-.6303	-.5155	-.0985	-.0042	-.0186	-.1556	-.2905	-.1829	-.0554	-.0121	.0028
30.000			.1877	-.3222	-.6278	-.4913	-.1084	-.0133	-.0439	-.2286	-.3817	-.2135	-.0852	-.0460	-.0191
60.000			.2449	-.2641	-.5721	-.4064	-.0846	-.0017	-.1006	-.4189	-.6404	-.4191	-.1102	-.0328	.0198
90.000		.7742	.3511	-.1569	-.4853	-.2330	.0235	.2131	.2819		-.6251	-.7045	-.2090	-.0298	.0252
120.000			.4796	-.0268	-.3652	-.2527	-.0032	.2025	.3502	.0336	-.0246	-.2026	-.2048	-.0899	.0120
135.000								.1592		.1834		-.2557		-.1307	
150.000			.5845	.0653	-.2796	-.2349	-.0426	.1402	.2521	.3169	-.0733	-.5034	-.3490	-.2288	-.0669
165.000				.1032	-.2382	-.2135	-.0490	.1301	.2425	.3505	.1216	-.4737	-.2794	-.1908	-.0227
180.000	1.0400	1.0490	.6401	.1133	-.2305	-.2063	-.0163	.1329	.2410	.3527	.2074	-.5142	-.2422	-.1808	-.0152
270.000		.7686							.2724						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0123	-.0607	-.3240
30.000	-.0165	-.0483	-.2940
60.000	.0076	-.0215	-.1606
90.000	.0239	-.0320	
120.000	.0464	-.1359	.0571
135.000	.0402	-.0320	-.0112
150.000	-.0292	-.0659	-.1591
165.000	.0308	-.0150	.0685
180.000	.0372	-.0065	-.1055

MACH (1) = .898 ALPHAO(2) = -4.140

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1020	.7292	.2825	-.2451	-.5608	-.6158	-.0877	-.0014	-.0076	-.1534	-.2022	-.1441	-.0464	-.0089	-.0026
30.000			.2901	-.2349	-.5469	-.5594	-.0882	.0118	.0009	-.2344	-.2462	-.1829	-.0399	-.0226	-.0283
60.000			.3283	-.1936	-.4930	-.4184	-.0382	.0832	.0428	-.4617	-.5426	-.3541	-.0474	-.0106	-.0006
90.000		.8302	.3869	-.1346	-.4574	-.1760	.0634	.2656	.3963		-.5510	-.7270	-.1329	-.0163	.0085
120.000			.4509	-.0722	-.4099	-.2006	.0083	.1949	.2950	-.1711	-.0912	-.1779	-.1741	-.1036	-.0008
135.000								.1426		.1039		-.2392		-.1372	
150.000			.5023	-.0224	-.3714	-.2308	-.0529	.1186	.2105	.2541	-.0942	-.4743	-.3225	-.2326	-.0723

ARC11-71S IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T17)

MACH (1) = .898 ALPHAO(2) = -4.140

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
165.000				-.0014	-.3546	-.2396	-.0591	.0955	.1994	.3109	.1006	-.5166	-.2579	-.1933	-.0272
180.000	1.1020	.9631	.5279	-.0023	-.3502	-.2376	-.0459	.0963	.1986	.3020	.1868	-.5672	-.2186	-.1793	-.0203
270.000		.8285							.3902						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0081	-.0395	-.3035
30.000	-.0123	-.0313	-.2849
60.000	.0098	.0031	-.1706
90.000	.0345	.0046	
120.000	.0588	-.0804	.1036
135.000	.0548	.0118	.0291
150.000	-.0024	-.0163	-.0875
165.000	.0477	.0266	.0551
180.000	.0514	.0340	-.1186

MACH (1) = .898 ALPHAO(3) = -.220

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1260	.8375	.3930	-.1409	-.4904	-.5504	-.0918	.0082	.0149	-.1400	-.1732	-.0898	-.0411	-.0217	-.0124
30.000			.3935	-.1396	-.4914	-.5460	-.0850	.0342	.0423	-.2039	-.1910	-.1107	-.0579	-.0427	-.0179
60.000			.3940	-.1401	-.4735	-.3130	-.0195	.1343	.1463	-.5297	-.5002	-.2071	.0020	-.0068	-.0014
90.000		.8522	.4002	-.1295	-.4528	-.3629	.0850	.2890	.4404		-.7081	.0485	.0124	-.0902	-.0665
120.000			.4052	-.1257	-.4567	-.2071	.0100	.1725	.2295	-.3205	-.1990	-.0743	-.1006	-.1144	-.0112
135.000								.1206		.0149		-.1357		-.1485	
150.000			.4182	-.1138	-.4484	-.2740	-.0575	.0963	.1666	.2026	-.1363	-.3503	-.2600	-.2313	-.0688
165.000				-.1035	-.4520	-.3839	-.0675	.0710	.1602	.2655	.0800	-.5122	-.1831	-.1844	-.0247
180.000	1.1260	.8665	.4172	-.1113	-.4511	-.3824	-.0555	.0710	.1542	.2613	.1662	-.5978	-.1689	-.1645	-.0150
270.000		.8549							.4391						

X/LT	.7460	.8530	.9280
PHI			
.000	.0000	-.0176	-.2528
30.000	.0035	-.0027	-.2277
60.000	.0173	.0312	-.1047
90.000	.0240	.0527	
120.000	.0671	-.0052	.1033
135.000	.0723	.0586	.0625
150.000	.0320	.0359	-.0216

ARC11-715 IA14 01+712+S12N25+A711 EXTERNAL TANK (RB1717)

MACH (1) = .895 ALPHA(3) = -.220

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L	.7460	.8530	.9280
PHI			
165.000	.0717	.0647	.0383
180.000	.0752	.0721	-.1246

MACH (1) = .893 ALPHA(4) = 3.830

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1110	.9377	.5049	-.0260	-.4051	-.4581	-.0996	.0201	.0434	-.0902	-.1186	-.0686	-.0230	-.0081	-.0022
30.000			.4880	-.0450	-.4012	-.4744	-.0781	.0508	.0850	-.1406	-.1403	-.0723	-.0164	-.0166	-.0100
60.000			.4492	-.0822	-.4489	-.3930	-.0154	.1630	.2230	-.4066	-.2815	-.1025	-.0136	-.0181	-.0062
90.000		.8352	.3954	-.1306	-.4790	-.1754	.0664	.2698	.4204		-.6597	-.2073	-.0707	-.1160	-.0579
120.000			.3450	-.1786	-.5044	-.2203	-.0072	.1283	.1369	-.2363	-.4045	-.1434	-.0450	-.0828	.0098
135.000								.0924		.0299		-.2365		-.0988	
150.000			.3205	-.2048	-.5435	-.4112	-.0571	.0743	.1186	.1895	-.1453	-.3564	-.1975	-.1830	-.0412
165.000				-.2127	-.5484	-.3617	-.0833	.0035	.1305	.2521	.0764	-.5515	-.1397	-.1474	-.0001
180.000	1.1110	.7540	.3045	-.2266	-.5491	-.3598	-.0561	.0587	.1312	.2432	.1620	-.6450	-.1237	-.1199	.0103
270.000		.8399							.4201						

X/L	.7460	.8530	.9280
PHI			
.000	.0145	.0077	-.1966
30.000	.0135	.0180	-.1924
60.000	.0236	.0452	-.0776
90.000	.0392	.0734	
120.000	.0989	.0576	.1248
135.000	.0994	.1045	.0845
150.000	.0601	.0761	.0095
165.000	.1033	.1112	.0628
180.000	.1087	.1109	-.1146

ARC11-716 IA14 C1+T12+S12N25+AT11 EXTERNAL TANK (RB1T17)

MACH (1) = .898 ALPHAO(5) = 8.030

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0570	1.0300	.6236	.0949	-.2930	-.3462	-.1092	.0404	.0850	-.0079	-.0200	-.0079	.0083	.0145	.0194
30.000			.5810	.0532	-.3327	-.3626	-.0957	.0658	.1228	-.0559	-.0487	-.0154	.0012	.0034	.0115
60.000			.4773	-.0463	-.4200	-.3533	-.0113	.1770	.2892	-.2786	-.0928	.0028	.0064	-.0031	.0046
90.000		.7734	.3536	-.1575	-.5137	-.2717	.0349	.2281	.3223		-.4957	-.1252	-.0470	-.0402	-.0116
120.000			.2547	-.2563	-.5756	-.2691	-.0574	.0410	.0066	-.1693	-.5052	-.2137	-.0311	-.0417	.0219
135.000								.0348		.0258		-.2831		-.0665	
150.000			.2120	-.3070	-.6049	-.4939	-.0509	.0405	.0637	.1746	-.1220	-.3657	-.1717	-.1311	-.0292
165.000				-.3244	-.6158	-.3211	-.0663	.0442	.1110	.2251	.0764	-.5708	-.1075	-.1045	.0237
180.000	1.0570	.6249	.1820	-.3361	-.6134	-.2644	-.0732	.0457	.1179	.2360	.1645	-.6901	-.1042	-.0797	.0291
270.000		.7855							.3257						

X/LT	.7460	.8530	.9280
PHI			
.000	.0348	.0307	-.1586
30.000	.0370	.0406	-.1742
60.000	.0378	.0603	-.1089
90.000	.0625	.0440	
120.000	.1201	.1030	.1209
135.000	.1196	.1365	.0982
150.000	.0874	.1138	.0266
165.000	.1239	.1360	.0918
180.000	.1294	.1401	-.0927

MACH (2) = .977 ALPHAO(1) = -7.920

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0920	.6834	.2544	-.2439	-.5567	-.6074	-.1645	-.0860	.0853	-.0569	-.3222	-.5147	-.0838	-.0199	.0373
30.000			.2670	-.2272	-.5474	-.5580	-.2447	.0024	.0581	-.1852	-.4322	-.3279	-.1359	-.0783	.0054
60.000			.3254	-.1807	-.5105	-.5357	-.3808	.0774	-.0026	-.4934	-.7456	-.3748	-.3005	-.1069	.0422
90.000		.8379	.4222	-.0837	-.4398	-.5102	.0170	.2980	.3635		-.6187	-.7054	-.1988	-.1315	-.0165
120.000			.5395	.0365	-.3474	-.4248	.0005	.2863	.4267	.0693	.0569	-.1234	-.1963	-.2676	-.0667
135.000								.2476		.2457		-.1642		-.3350	
150.000			.6345	.1170	-.2783	-.3509	-.2912	.2303	.3247	.3803	.0209	-.3823	-.2947	-.4705	-.1462
165.000				.1568	-.2452	-.3164	-.2722	.2064	.3077	.4281	.1995	-.3274	-.2307	-.3709	-.1177
180.000	1.0920	1.0900	.6880	.1669	-.2357	-.3039	-.0317	.1850	.3052	.4177	.2820	-.3515	-.1905	-.3758	-.1089
270.000		.8335							.3491						

X/LT	.7460	.8530	.9280
PHI			

DATE 06 JAN 75 TABULATED PRESSURE DATA - IA14A - VOL. 9

ARC11-716 IA14 01+T12+S12N25+AT11 EXTERNAL TANK (RB1T17)

MACH (2) = .977 ALPHAO(1) = -7.925

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0525	.0208	-.2130
30.000	.0427	.0290	-.1760
60.000	.0800	.0583	-.0007
90.000	.0800	.0539	
120.000	.1090	-.0116	.0785
135.000	.0997	.0504	.0404
150.000	.0627	.0178	-.1043
165.000	.0909	.0560	.1256
180.000	.0959	.0623	-.0133

MACH (2) = .976 ALPHAO(2) = -3.880

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1450	.7938	.3578	-.1600	-.4965	-.5557	-.1936	-.0415	.1153	-.0413	-.3038	-.4624	-.0330	.0079	.0265
30.000			.3671	-.1521	-.4851	-.5519	-.2979	.0402	.1170	-.1347	-.3658	-.3656	-.0618	-.0303	-.0028
60.000			.4003	-.1200	-.4642	-.4595	-.2324	.2229	.1485	-.4918	-.6477	-.2810	-.1092	-.0806	.0229
90.000		.8861	.4518	-.0048	-.4263	-.4952	-.0248	.3634	.4689		-.6856	-.7060	-.1847	-.1005	-.0107
120.000			.5095	-.0108	-.3835	-.4540	-.0196	.2425	.3705	-.0874	-.0302	-.1314	-.1719	-.2450	-.0452
135.000								.2022		.1570		-.1737		-.2913	
150.000			.5526	.0321	-.3448	-.4226	-.1276	.1849	.2809	.3017	-.0466	-.3726	-.2663	-.4110	-.1080
165.000				.0498	-.3340	-.4126	-.3005	.1759	.2595	.3591	.1425	-.3800	-.2115	-.3221	-.0852
180.000	1.1450	1.0030	.5758	.0525	-.3342	-.4066	-.0778	.1370	.2443	.3663	.2356	-.4218	-.1789	-.3160	-.0899
270.000		.8880							.4680						

X/LT	.7460	.8530	.9280
PHI			
.000	.0509	.0404	-.1854
30.000	.0363	.0432	-.1686
60.000	.0733	.0844	-.0350
90.000	.0903	.1006	
120.000	.1138	.0371	.1261
135.000	.1124	.0905	.0774
150.000	.0790	.0659	-.0361
165.000	.1041	.0938	.1053
180.000	.1025	.1001	-.0394

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T17)

MACH (2) = .977 ALPHAO(3) = .090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1620	.8971	.4638	-.0395	-.4206	-.4905	-.5627	.0221	.1379	-.0180	-.2678	-.3753	.0079	.0128	.0120
30.000			.4643	-.0601	-.4206	-.4970	-.4564	.0043	.1791	-.0790	-.3122	-.3397	-.0127	-.0108	.0013
60.000			.4614	-.0625	-.4209	-.4824	-.2403	.1835	.2524	-.3641	-.4866	-.2387	-.0377	-.0069	.0049
90.000		.9026	.4638	-.0568	-.4198	-.4756	-.1139	.3856	.5117		-.7150	-.3513	-.0891	-.0675	-.0093
120.000			.4628	-.0571	-.4214	-.4646	-.2466	.2587	.3013	-.2257	-.2430	-.1068	-.0916	-.1770	-.0447
135.000								.1420		.0631		-.1782		-.2106	
150.000			.4704	-.0524	-.4203	-.4827	-.1144	.0876	.2377	.2435	-.1398	-.3405	-.1996	-.3012	-.1104
165.000				-.0549	-.4136	-.4873	-.1202	.0786	.2137	.2904	.0881	-.4154	-.1532	-.2395	-.0631
180.000	1.1620	.9097	.4696	-.0546	-.4176	-.4851	-.0812	.0163	.1940	.2882	.1891	-.4807	-.1355	-.2258	-.0617
270.000		.9037							.5154						

X/LT	.7460	.8530	.9280
PHI			
.000	.0488	.0559	-.1489
30.000	.0494	.0644	-.1310
60.000	.0658	.0950	-.0501
90.000	.0942	.1190	
120.000	.1278	.0794	.1674
135.000	.1305	.1239	.1197
150.000	.1004	.1081	.0414
165.000	.1231	.1317	.0920
180.000	.1231	.1314	-.0616

MACH (2) = .973 ALPHAO(4) = 4.020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1520	.9909	.5670	.0413	-.3524	-.4227	-.5067	.0888	.1516	.0068	-.2052	-.2719	.0276	.0253	.0133
30.000			.5473	.0230	-.3679	-.4385	-.4945	.1334	.1909	-.0368	-.2252	-.2699	.0209	.0116	.0033
60.000			.5048	-.0181	-.3985	-.4632	-.0870	.1056	.3274	-.2600	-.3258	-.2087	-.0159	.0072	.0003
90.000		.8853	.4540	-.0685	-.4402	-.4923	-.1897	.3345	.4869		-.6131	-.2496	-.0049	-.0333	-.0420
120.000			.4037	-.1180	-.4727	-.5238	-.3129	.2049	.2041	-.2981	-.4275	-.2167	-.0016	-.0770	-.0077
135.000								.1266		.0322		-.3003		-.1025	
150.000			.3799	-.1464	-.4898	-.5467	-.2030	.0544	.1796	.2239	-.1263	-.3899	-.1365	-.1840	-.0602
165.000				-.1607	-.4999	-.5581	-.1146	.0028	.1774	.2703	.0938	-.4086	-.1107	-.1380	-.0121
180.000	1.1520	.8036	.3638	-.1612	-.5067	-.5605	-.1024	-.0264	.1631	.2665	.1760	-.5553	-.1054	-.1199	-.0030
270.000		.8902							.4824						

X/LT	.7460	.8530	.9280
PHI			

AP011-716 IA14 01+T12+S12N25+AT11 EXTERNAL TANK (RB1T17)

MACH (2) = .973 ALPHA(4) = 4.020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0544	.0708	-.1002
30.000	.0552	.0801	-.1018
60.000	.0615	.0997	-.0024
90.000	.0876	.1368	
120.000	.1420	.1278	.1515
135.000	.1406	.1553	.1202
150.000	.1159	.1344	.0524
165.000	.1401	.1585	.0796
180.000	.1459	.1578	-.0582

MACH (2) = .977 ALPHA(5) = 8.030

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1040	1.0790	.6786	.1556	-.2532	-.3372	-.4301	.1139	.1743	.0597	-.1429	-.0284	.0428	.0339	.0308
30.000			.6375	.1158	-.2857	-.3707	-.4450	.1420	.2145	.0304	-.1694	-.0029	.0334	.0224	.0217
60.000			.5401	.0202	-.3623	-.4387	-.4591	.2645	.3691	-.1461	-.2103	.0053	.0148	.0055	-.0007
90.000		.8347	.4216	-.0862	-.4495	-.5072	-.3561	.3143	.3784		-.4843	-.1625	-.0540	-.0374	.0023
120.000			.3249	-.1814	-.5172	-.5771	-.2283	.0624	.0769	-.1734	-.5113	-.2305	-.0093	-.0277	-.0008
135.000								.0508		.0406		-.3198		-.0561	
150.000			.2788	-.2198	-.5459	-.5435	-.3654	-.0027	.1283	.2103	-.1097	-.3693	-.1107	-.1357	-.0515
165.000				-.2356	-.5521	-.6102	-.1910	-.1365	.1983	.2612	.0905	-.3809	-.0791	-.0878	.0074
180.000	1.1040	.6920	.2545	-.2440	-.5567	-.6118	-.1768	-.1158	.1953	.2645	.1780	-.5772	-.0830	-.0699	.0181
270.000		.8437							.3861						

X/LT	.7460	.8530	.9280
PHI			
.000	.0731	.0973	-.0564
30.000	.0731	.1028	-.0800
60.000	.0665	.1184	-.0379
90.000	.1082	.1181	
120.000	.1561	.1754	.1570
135.000	.1555	.1905	.1284
150.000	.1328	.1637	.0727
165.000	.1566	.1823	.1328
180.000	.1582	.1779	-.0374

ARC11-715 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T17)

MACH (3) = 1.102 ALPHAO(1) = -7.940

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1690	.7859	.3773	-.0820	-.3762	-.4339	-.4935	-.3080	.0541	.1076	-.1063	-.3014	-.0413	.0054	-.0228
30.000			.3895	-.0723	-.3716	-.4309	-.4845	-.1013	.0979	-.0270	-.2271	-.1873	-.0698	-.0386	-.0522
60.000			.4414	-.3316	-.3438	-.4066	-.4227	-.0243	.0782	-.3848	-.5534	-.2185	-.1869	-.0478	-.0279
90.000		.9330	.0344	.0544	-.2930	-.3484	-.1658	.0542	.1805		-.3915	-.4678	-.0856	-.0875	-.0998
120.000			.5454	.1630	-.1971	-.2704	-.3575	.1490	.5571	.2266	.2079	.0515	-.0442	-.1039	-.1940
135.000								.0000		.0355		.0186		-.1601	
150.000			.7340	.2411	-.1351	-.2114	-.3098	-.1910	.4573	.0119	.1785	-.1727	-.1127	-.2991	-.2781
165.000				.2774	-.1053	-.1847	-.2750	-.1925	.4361	.5529	.3422	-.1149	-.0534	-.1972	-.2078
180.000	1.1690	1.1740	.7846	.2893	-.0997	-.1745	-.2696	.0293	.4165	.5421	.4193	-.1203	-.0140	-.1663	-.1848
270.000		.9294							.4614						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0428	.0658	-.0696
30.000	-.0533	.0740	-.0308
60.000	-.0193	.0839	.1104
90.000	.0022	.0795	
120.000	.0224	.0043	.1165
135.000	.0040	.0633	.0654
150.000	-.0108	.0303	-.0185
165.000	.0104	.0731	.2151
180.000	.0117	.0790	.1083

MACH (3) = 1.101 ALPHAO(2) = -3.890

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2220	.8914	.4755	.0016	-.3220	-.3819	-.4547	-.2024	.1064	.1308	-.0943	-.2653	-.0376	.0399	-.0027
30.000			.4835	.0090	-.3213	-.3814	-.4466	-.3004	.1490	.0360	-.1763	-.2460	-.0483	.0086	-.0309
60.000			.5144	.0271	-.3004	-.3596	-.3907	-.1575	.2259	-.3006	-.4780	-.1327	-.0977	-.0757	-.0225
90.000		.9795	.5661	.0723	-.2637	-.3315	-.4141	.1690	.5511		-.5419	-.4810	-.0788	-.0584	-.0784
120.000			.6182	.1239	-.2280	-.2987	-.3796	.1090	.4875	.0770	.1280	.0411	-.0365	-.0945	-.1757
135.000								.1147		.3037		-.0055		-.1319	
150.000			.6526	.1647	-.1968	-.2653	-.3683	.1026	.3073	.4039	.1365	-.1694	-.1057	-.2617	-.2631
165.000				.1795	-.1836	-.2589	-.3490	-.1200	.3142	.4553	.2981	-.1548	-.0485	-.1750	-.1882
180.000	1.2220	1.0940	.5645	.1825	-.1843	-.2541	-.3446	-.0030	.2632	.4539	.3839	-.1768	-.0178	-.1763	-.1939
270.000		.9818							.5586						

X/LT	.7460	.8530	.9280
PHI			

AFC11-716 TA14 01+712+S12N25+A711 EXTERNAL TANK (RB1T17)

MACH (1) = 1.101 ALPHA(2) = -3.590

SECTION (11)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L*	.7460	.8530	.9280
PHI			
.000	-.0488	.0795	-.0391
30.000	-.0601	.0736	-.0292
60.000	-.0331	.1094	.0759
90.000	.0050	.1181	
120.000	.0364	.0449	.1516
135.000	.0258	.1047	.1158
150.000	.0114	.0910	.0032
165.000	.0241	.1163	.2056
180.000	.0116	.1207	.0956

MACH (3) = 1.103 ALPHA(3) = .090

SECTION (11)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L*	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2390	.9925	.5779	.0747	-.2566	-.3279	-.4053	-.3479	.1717	.1512	-.0712	-.2005	-.0805	.0393	.0180
30.000			.5794	.0703	-.2581	-.3307	-.4055	-.3315	.1579	.1079	-.1408	-.2120	-.0469	.0249	.0021
60.000			.5748	.0675	-.2584	-.3269	-.4101	-.0056	.3482	-.1738	-.3143	-.1074	-.0090	.0023	-.0235
90.000		.9974	.5736	.0757	-.2586	-.3287	-.4011	.1133	.5026		-.5533	-.2435	-.1203	- 0683	-.0509
120.000			.5726	.0765	-.2594	-.3279	-.3767	-.0383	.3959	-.0622	-.1015	.0271	.0239	-.0542	-.1317
135.000								-.0481		.2026		-.0600		-.0809	
150.000			.5820	.0749	-.2576	-.3243	-.4119	-.0399	.2030	.3702	.0124	-.1766	-.0557	-.1818	-.2155
165.000				.0820	-.2516	-.3251	-.4054	-.0291	.0821	.3704	.2516	-.1936	-.0272	-.1280	-.1494
180.000	1.2390	1.0040	.5802	.0823	-.2564	-.3269	-.4039	-.0245	.2011	.3612	.3049	-.2468	.0005	-.1121	-.1435
270.000		1.0010							.5961						

X/L*	.7480	.8530	.9280
PHI			
.000	-.0442	.0661	-.0126
30.000	-.0452	.0845	-.0029
60.000	-.0368	.1195	.0542
90.000	.0163	.1295	
120.000	.0565	.1032	.2278
135.000	.0481	.1571	.1715
150.000	.0302	.1426	.1039
165.000	.0559	.1590	.1679
180.000	.0607	.1618	.0524

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T17)

MACH (3) = 1.100 ALPHAO(4) = 4.060

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2270	1.0820	.6775	.1785	-.1655	-.2572	-.3453	-.2942	.2291	.1631	-.0256	-.1271	-.0836	.0336	.0433
30.000			.6595	.1594	-.1990	-.2701	-.3564	-.3047	.2403	.1416	-.0905	-.1363	-.0526	.0244	.0323
60.000			.6177	.1176	-.2281	-.2938	-.3895	.0664	.3525	-.0610	-.1641	-.0987	-.0081	.0193	.0174
90.000		.9796	.5665	.0736	-.2640	-.3313	-.4082	.1765	.5580		-.4846	-.1762	-.0255	-.0492	-.0440
120.000			.5191	.0313	-.2961	-.3620	-.4236	.0111	.2793	-.2159	-.3004	-.1087	.0712	.0051	-.0670
135.000								-.0883		.0851		-.2561		-.0105	
150.000			.4964	.0142	-.3189	-.3782	-.4540	-.0276	.1644	.2907	.0399	-.2645	-.0140	-.1019	-.1335
165.000				.0084	-.3199	-.3820	-.4558	-.0051	.1032	.3035	.2559	-.1714	-.0122	-.0492	-.0734
180.000	1.2270	.9022	.4812	.0031	-.3204	-.3865	-.4591	-.0140	.1183	.3078	.3119	-.3190	-.0114	-.0384	-.0672
270.000		.9847							.5603						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0032	.0503	.0317
30.000	-.0058	.0743	.0284
60.000	-.0045	.1144	.0692
90.000	.0244	.1257	
120.000	.0840	.1605	.2183
135.000	.0761	.1945	.1882
150.000	.0575	.1838	.1301
165.000	.0874	.1974	.1846
180.000	.0922	.1953	.0639

MACH (3) = 1.099 ALPHAO(5) = 8.020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1040	1.1620	.7790	.2803	-.1014	-.1799	-.2735	-.2236	.2922	.2239	.0306	-.0430	.0151	.0361	.0552
30.000			.7390	.2436	-.1315	-.2123	-.2987	-.2490	.3086	.1953	-.0416	-.0364	.0090	.0333	.0483
60.000			.6469	.1543	-.2021	-.2730	-.3709	-.0980	.4663	.0847	-.0969	.0174	.0246	.0379	.0270
90.000		.9298	.5347	.0551	-.2862	-.3527	-.4043	.1671	.4691		-.3532	-.0361	.0018	-.0194	-.0155
120.000			.4439	-.0273	-.3482	-.4103	-.4763	-.0751	.1410	-.1156	-.4066	-.1427	.0490	.0342	-.0048
135.000								-.1151		.0744		-.2662		.0109	
150.000			.4018	-.0602	-.3700	-.4273	-.4141	-.1154	.1090	.2680	.0132	-.3077	-.0400	-.0686	-.0704
165.000				-.0818	-.3834	-.4331	-.2013	-.0774	.0368	.2887	.2224	-.1670	-.0094	-.0078	-.0058
180.000	1.1040	.7823	.3778	-.0892	-.3806	-.4379	-.2505	-.0851	.0514	.2995	.2931	-.3856	-.0156	-.0001	-.0019
270.000		.9395							.4659						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT11 EXTERNAL TANK (RB1T17)

MACH (3) = 1.099 ALPHAO(5) = 8.020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0357	.0543	.0722
30.000	.0306	.0796	.0453
60.000	.0196	.1034	.0456
90.000	.0547	.0855	
120.000	.1060	.1981	.1938
135.000	.0970	.2130	.1715
150.000	.0814	.1994	.1114
165.000	.1165	.2202	.2245
180.000	.1193	.2189	.0722

MACH (4) = 1.248 ALPHAO(1) = -7.940

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2480	.8450	.4353	-.0054	-.2678	-.3181	-.3737	-.3333	.0061	.1097	-.0034	-.2034	-.2005	-.0383	.0153
30.000			.4505	.0084	-.2616	-.3157	-.3696	-.3249	-.0456	.0072	-.1515	-.2384	-.1471	-.0687	-.0331
60.000			.5021	.0523	-.2370	-.2901	-.3614	-.298	.0509	-.3713	-.5191	-.2426	-.2294	-.0740	-.0109
90.000		.9952	.5928	.1339	-.1790	-.2414	-.3134	-.0301	.5352		-.2559	-.2953	-.2027	-.0671	-.0795
120.000			.7029	.2319	-.1045	-.1721	-.2506	-.1931	.4994	.2644	.2738	.1567	.0103	.0014	-.1685
135.000								-.1813		.4353		.1329		-.0494	
150.000			.7913	.3081	-.0452	-.1128	-.2055	-.1677	.3529	.5625	.1767	-.0348	-.0444	-.1754	-.2175
165.000				.3413	-.0144	-.0877	-.1779	-.1422	.0004	.5821	.3822	.0318	.0506	-.0742	-.1071
180.000	1.2480	1.2420	.8408	.3517	-.0087	-.0802	-.1687	-.1162	.1849	.5036	.4816	.0551	.1038	-.0855	-.1511
270.000		.9898							.5246						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0174	-.0149	-.0194
30.000	-.0508	-.0289	.0289
60.000	-.0418	.0058	.1646
90.000	-.0732	.0466	
120.000	-.0908	.0095	.1322
135.000	-.0342	.0626	.0783
150.000	-.1033	.0406	.0506
165.000	-.0825	.0733	.2809
180.000	-.0486	.0723	.2056

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (R81T17)

MACH (4) = 1.246 ALPHAO(2) = -3.840

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3000	.9524	.5330	.0750	-.2213	-.2735	-.3411	-.3011	-.1222	.1684	.0148	-.1715	-.2425	-.0597	.0222
30.000			.5426	.0830	-.2153	-.2696	-.3348	-.2924	.0238	.0808	-.1327	-.2203	-.1281	-.0676	-.0132
60.000			.5748	.1070	-.1974	-.2551	-.3295	-.2629	.2098	-.2013	-.4296	-.1485	-.0777	-.1472	-.0256
90.000		1.0440	.6237	.1553	-.1652	-.2286	-.3037	-.2145	.5834		-.4913	-.3061	-.1583	-.0489	-.0690
120.000			.6791	.2003	-.1314	-.1958	-.2734	-.2413	.3724	.1361	-.0705	.1344	-.0106	.0025	-.1569
135.000								-.2237		.3361		.0366		-.0298	
150.000			.7154	.2275	-.1059	-.1678	-.2582	-.2127	.2428	.3909	.1356	-.0909	-.0668	-.1479	-.2102
165.000				.2441	-.0916	-.1584	-.2434	-.2106	.2473	.4120	.3303	-.0345	.0390	-.0683	-.1247
180.000	1.3000	1.1570	.7365	.2480	-.0896	-.1579	-.2384	-.1827	.1511	.3822	.4257	-.0080	.0843	-.0418	-.1268
270.000		1.0400							.5884						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0106	-.0114	.0038
30.000	-.0355	-.0122	.0140
60.000	-.0187	.0302	.1221
90.000	-.0756	.0800	
120.000	-.0721	.0517	.1894
135.000	-.0537	.1137	.1383
150.000	-.0807	.0959	.0601
165.000	-.0472	.1239	.2784
180.000	-.0401	.1273	.1873

MACH (4) = 1.244 ALPHAO(3) = .050

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3190	1.0520	.6318	.1520	-.1603	-.2233	-.2956	-.2632	-.1835	.2125	.0422	-.1391	-.1919	-.0795	.0119
30.000			.6337	.1520	-.1614	-.2257	-.2930	-.2637	.0622	.1567	-.0853	-.1593	-.1204	-.0687	.0048
60.000			.6303	.1515	-.1616	-.2236	-.3016	-.2400	.3025	-.0754	-.2709	-.1699	-.0363	-.0355	-.0[illegible]
90.000		1.0590	.6327	.1562	-.1614	-.2251	-.2977	-.2355	.6129		-.4584	-.4129	-.2945	-.0910	-.[illegible]5
120.000			.6311	.1575	-.1601	-.2231	-.2940	-.2354	.3810	.0073	-.0617	-.1460	-.0137	.0147	-.0995
135.000								-.2541		.2183		-.1635		.0166	
150.000			.6368	.1622	-.1590	-.2210	-.3029	-.2536	.1913	.3807	.0711	-.1760	-.1676	-.0598	-.1963
165.000				.1581	-.1575	-.2192	-.2974	-.2630	.1892	.3387	.3272	-.0545	-.1106	-.0434	-.1006
180.000	1.3190	1.0640	.6353	.1607	-.1577	-.2218	-.2963	-.2372	.1129	.3217	.3901	-.0702	-.1270	-.0398	-.0805
270.000		1.0610							.6218						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01-T12+S12N25+AT11 EXTERNAL TANK (RB1T17)

MACH (4) = 1.244 ALPHAO(3) = .050

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0042	.0040	.0155
30.000	-.0034	.0105	.0251
60.000	-.0265	.0370	.0739
90.000	-.0229	.0773	
120.000	-.0318	.0925	.2626
135.000	-.0124	.1601	.2002
150.000	-.0308	.1541	.0917
165.000	-.0018	.1714	.2584
180.000	.0069	.1721	.1698

MACH (4) = 1.249 ALPHAO(4) = 4.010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0030	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3040	1.1440	.7327	.2439	-.0922	-.1580	-.2339	-.2052	-.1426	.2779	.0880	-.0993	-.1257	-.0587	-.0059
30.000			.7152	.2298	-.1021	-.1696	-.2451	-.2141	.1306	.1789	-.0111	-.1030	-.1069	-.0566	-.0057
60.000			.6741	.1931	-.1298	-.1909	-.2764	-.2391	.2207	.0440	-.1466	-.1299	-.0142	-.0259	-.0138
90.000		1.0410	.6239	.1587	-.1619	-.2251	-.3000	-.2262	.5742		-.4145	-.2077	-.0291	-.0647	-.0752
120.000			.5752	.1138	-.1938	-.2526	-.3213	-.2697	.2228	-.1126	-.2819	-.2912	-.0105	.0472	-.0265
135.000								-.2731		.0704		-.2651		.0433	
150.000			.5533	.0898	-.2094	-.2663	-.3375	-.2795	.1812	.2881	.1358	-.2225	-.2483	-.0030	-.0720
165.000				.0830	-.2172	-.2708	-.3402	-.3005	.1237	.2592	.3245	-.0284	-.1981	-.0046	-.0268
180.000	1.3040	.9628	.5379	.0772	-.2161	-.2723	-.3386	-.2540	.0866	.2375	.3713	-.1202	-.1976	.0286	-.0215
270.000		1.0430							.5936						

X/LT	.7460	.8530	.9280
PHI			
.000	.0170	.0252	.0475
30.000	.0138	.0335	.0632
60.000	.0065	.0597	.1131
90.000	-.0056	.0800	
120.000	.0180	.1550	.3014
135.000	.0290	.2104	.2554
150.000	.0142	.2101	.1841
165.000	.0521	.2233	.2316
180.000	.0615	.2194	.1833

ARC11-716 IA14 01+T12+S12N25+AT11 EXTERNAL TANK (RB1T17)

MACH (4) = 1.249 ALPHAO(5) = 7.930

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2620	1.2240	.8317	.3412	-.0155	-.0886	-.1708	-.1427	-.0891	.3544	.1502	-.0393	-.0515	-.0046	.0067
30.000			.7926	.3079	-.0417	-.1153	-.1934	-.1666	-.0183	.2890	.0508	-.0470	-.0435	-.0185	-.0002
60.000			.7027	.2245	-.1070	-.1716	-.2596	-.1902	.4772	.1285	-.1172	-.0287	-.0007	-.0077	.0025
90.000		.9951	.5951	.1367	-.1789	-.2427	-.3024	-.1850	.5180		-.3383	-.1214	.0143	.0116	-.0038
120.000			.5060	.0606	-.2354	-.2925	-.3588	-.2971	.0994	-.1750	-.3460	-.2424	-.0193	.0410	.0135
135.000								-.3157		-.0411		-.3227		.0451	
150.000			.4669	.0199	-.2590	-.3106	-.3746	-.3186	.1321	.1761	.1115	-.3031	-.2339	.0171	-.0396
165.000				.0063	-.2709	-.3179	-.3814	-.2808	.0459	.1946	.2906	-.0193	-.2040	.0229	.0208
180.000	1.2620	.8570	.4411	-.0010	-.2689	-.3207	-.3793	-.1779	.0485	.1925	.3476	-.1640	-.2037	.0323	.0250
270.000		1.0010							.5327						

X/LT	.7460	.8530	.9280
PHI			
.000	.0203	.0545	.0916
30.000	.0226	.0642	.0819
60.000	.0268	.0838	.0879
90.000	.0506	.0882	
120.000	.0839	.1998	.2354
135.000	.0831	.2312	.2283
150.000	.0639	.2200	.1361
165.000	.1005	.2367	.3324
180.000	.1083	.2328	.2004

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T18) (02 OCT 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES
LREF = 38.7090 INCHES YMRP = .0000 INCHES
BREF = 38.7090 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAO = .000 ELEVON = .000
RUDDER = .000 SPDBRK = .000

MACH (1) = .898 BETAO (1) = -8.060

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0490	.7572	.3477	-.1743	-.5242	-.5469	-.1634	-.0559	-.0525	-.1603	-.2313	-.1296	-.0911	-.0857	-.0754
30.000			.4686	-.0538	-.4062	-.4167	-.1862	-.0409	-.0589	-.3440	-.2313	-.1511	-.0904	-.0774	-.0436
60.000			.5769	.0504	-.2794	-.2420	-.0536	.0935	.0760	-.6346	-.4491	-.1131	.0354	.0052	-.0058
90.000		1.0390	.6269	.1014	-.2143	-.1475	.0907	.2781	.4095		-.6115	-.3213	-.1129	-.0706	-.0329
120.000			.5929	.0753	-.2471	-.1984	-.0111	.1427	.1661	-.4264	-.1521	.0669	-.0089	-.0356	.0371
135.000								.0775		.0224		-.0214		-.0629	
150.000			.5192	-.0004	-.3279	-.2988	-.0932	.0470	.0906	.2340	.1704	-.2056	-.2104	-.1557	-.0177
165.000				-.0711	-.4057	-.3812	-.0907	.0110	.0983	.2680	.1795	-.2473	-.1759	-.1567	-.0094
180.000	1.0480	.8494	.3811	-.1355	-.4586	-.4228	-.1193	.0077	.1242	.2683	.1338	-.5520	-.2124	-.2092	-.0434
270.000		.6222							.4838						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0639	-.0771	-.3011
30.000	-.0354	-.0355	-.2710
60.000	.0130	.0303	-.1352
90.000	-.0149	-.1010	
120.000	.1424	.0799	.3063
135.000	.1526	.1673	.3113
150.000	.1101	.1591	.2055
165.000	.1244	.1630	.3474
180.000	.0913	.1236	.0666

MACH (1) = .898 BETAO (2) = -4.010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1070	.8185	.3864	-.1482	-.4926	-.5575	-.1926	-.0118	-.0016	-.1502	-.1908	-.0957	-.0523	-.0382	-.0324
30.000			.4381	-.0896	-.4458	-.4716	-.1242	.0058	.0021	-.2651	-.2140	-.1131	-.0589	-.0500	-.0306
60.000			.4911	-.0425	-.3937	-.2675	-.0426	.1130	.1109	-.5841	-.4843	-.1528	.0248	.0078	-.0063
90.000		.9545	.5174	-.0150	-.3584	-.2257	.0770	.2779	.4235		-.6618	-.0652	-.0303	-.0474	-.0274
120.000			.5060	-.0214	-.3777	-.2233	.0004	.1573	.1937	-.3805	-.1866	-.0298	-.0662	-.0816	.0108
135.000								.1050		.0125		-.1209		-.1004	
150.000			.4760	-.0564	-.4044	-.3162	-.0730	.0797	.1319	.2196	.0451	-.2379	-.2344	-.1849	-.0346

ARC11-716 IA14 01+T12+S12N25+AT11 EXTERNAL TANK (R81T18)

MACH (1) = .898 BETAO (2) = -4.010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
165.000				-.0863	-.4372	-.3596	-.0869	.0547	.1373	.2745	.1461	-.4005	-.2070	-.1822	-.0008
180.000	1.1070	.8655	.4102	-.1211	-.4669	-.3317	-.0762	.0638	.1536	.2674	.1548	-.5816	-.1871	-.1764	-.0323
270.000		.7413							.4616						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0163	-.0305	-.2439
30.000	-.0051	-.0068	-.2347
60.000	.0153	.0353	-.1230
90.000	.0384	.0261	
120.000	.1042	.0419	.2088
135.000	.1129	.1273	.2301
150.000	.0835	.1154	.1117
165.000	.1097	.1359	.2610
180.000	.0954	.1094	.0254

MACH (1) = .897 BETAO (3) = .030

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1240	.8359	.3891	-.1410	-.4908	-.5440	-.0936	.0050	.0145	-.1423	-.1718	-.0971	-.0407	-.0239	-.0149
30.000			.3948	-.1401	-.4908	-.5401	-.0874	.0308	.0410	-.2073	-.1883	-.1196	-.0579	-.0429	-.0221
60.000			.3963	-.1393	-.4795	-.3132	-.0238	.1320	.1450	-.5323	-.4883	-.2074	.0031	-.0047	-.0012
90.000		.8539	.4061	-.1264	-.4594	-.3511	.0822	.2873	.4395		-.7106	-.0315	.0058	-.0996	-.0610
120.000			.4095	-.1195	-.4609	-.2158	.0072	.1722	.2275	-.3235	-.2020	-.0683	-.0991	-.1191	-.0079
135.000								.1197		.0171		-.1521		-.1410	
150.000			.4201	-.1105	-.4494	-.2963	-.0601	.0957	.1622	.2074	-.1384	-.3596	-.2608	-.2265	-.0639
165.000				-.1104	-.4516	-.3657	-.0711	.0699	.1558	.2664	.0840	-.5160	-.1929	-.1916	-.0233
180.000	1.1240	.8655	.4169	-.1126	-.4494	-.3848	-.0589	.0704	.1565	.2585	.1674	-.6019	-.1734	-.1739	-.0131
270.000		.8490							.4383						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0002	-.0196	-.2512
30.000	.0011	-.0047	-.2256
60.000	.0162	.0258	-.1061
90.000	.0211	.0485	
120.000	.0701	.0972	.1033
135.000	.0730	.0592	.0678
150.000	.0273	.0372	-.0126

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T18)

MACH (1) = .897 BETAO (3) = .030

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
165.000	.0673	.0688	.0557
180.000	.0750	.0717	-.1235

MACH (1) = .898 BETAO (4) = 4.109

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1040	.8132	.3789	-.1514	-.5009	-.5498	-.0985	-.0062	-.0026	-.1549	-.2179	-.1035	-.0517	-.0380	-.0289
30.000			.3252	-.2006	-.5284	-.5846	-.0598	.0489	.0607	-.1726	-.2276	-.1055	-.0577	-.0532	-.0328
60.000			.2962	-.2303	-.5576	-.3249	.0039	.1497	.1726	-.4777	-.5008	-.1925	-.0291	-.0313	-.0135
90.000		.7427	.2889	-.2352	-.5501	-.2476	.1025	.3037	.4599		-.6849	.1085	-.0373	-.1356	-.0937
120.000			.3059	-.2169	-.5338	-.2106	.0202	.1832	.2551	-.2564	-.1781	-.1038	-.1292	-.1332	-.0294
135.000								.1266		.0364		-.1920		-.1570	
150.000			.3486	-.1791	-.5073	-.3390	-.0509	.0967	.1783	.1817	-.2293	-.4467	-.3543	-.2605	-.0736
165.000				-.1418	-.4811	-.4343	-.0761	.0614	.1551	.2542	.0235	-.6038	-.1816	-.1659	-.0498
180.000	1.1040	.8687	.4112	-.1206	-.4541	-.4465	-.0784	.0542	.1391	.2493	.1597	-.6038	-.1841	-.2081	-.0461
270.000		.9502							.4221						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0140	-.0276	-.2421
30.000	-.0096	-.0172	-.2515
60.000	.0026	.0091	-.1076
90.000	-.0096	.0170	
120.000	.0396	-.0122	.0006
135.000	.0455	.0367	-.0597
150.000	-.0040	-.0301	-.1815
165.000	.0500	.0512	.0758
180.000	.0557	.0593	-.1237

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T18)

MACH (1) = .9[illegible] BETAO (5) = 8.130

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0470	.7571	.3419	-.1750	-.5200	-.5589	-.1685	-.0560	-.0523	-.1763	-.2421	-.1322	-.0912	-.0846	-.0741
30.000			.2457	-.2699	-.5874	-.5394	-.0460	.0358	.0558	-.1452	-.2784	-.1061	-.0662	-.0642	-.0523
60.000			.2006	-.3250	-.6142	-.2391	.0316	.1708	.1791	-.4308	-.4637	-.1973	-.0620	-.0518	-.0355
90.000		.6285	.1800	-.3247	-.6052	-.0966	.1073	.3100	.4817		-.6256	.1059	-.1060	-.1997	-.1678
120.000			.2027	-.3052	-.5952	-.1665	.0316	.1803	.2562	-.2108	-.2003	-.1270	-.1790	-.1693	-.0903
135.000								.1287		.0393		-.2214		-.1948	
150.000			.2597	-.2573	-.5655	-.0373	-.0540	.0899	.1817	.1598	-.3659	-.4822	-.3516	-.2597	-.1175
165.000				-.1878	-.5159	-.5036	-.0988	.0271	.1298	.2084	-.0140	-.6060	-.2255	-.2297	-.1091
180.000	1.0470	.7500	.3821	-.1380	-.4621	-.4841	-.1023	.0076	.0956	.2153	.1336	-.4586	-.2673	-.2699	-.1208
270.000		1.0380							.4107						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0600	-.0727	-.2939
30.000	-.0303	-.0362	-.2627
60.000	-.0174	-.0194	-.1241
90.000	-.0898	-.0479	
120.000	.0074	-.0268	-.0189
135.000	.0106	.0226	-.0819
150.000	-.0474	-.0571	-.1836
165.000	.0032	.0162	.0914
180.000	-.0127	.0091	-.1208

MACH (2) = .978 BETAO (1) = -8.050

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0940	.8216	.4182	-.0935	-.4484	-.5186	-.4738	-.0132	.0247	-.0948	-.3010	-.2659	-.0608	-.0535	-.0531
30.000			.5345	.0178	-.3565	-.4378	-.4900	.0096	.0354	-.2335	-.3043	-.1662	-.1295	-.0872	-.0286
60.000			.6348	.1146	-.2806	-.3530	-.2912	.1676	.1647	-.4735	-.4523	-.1891	-.1342	.0187	.0413
90.000		1.0840	.6805	.1625	-.2425	-.3176	.1518	.3401	.4779		-.5981	-.6035	-.1518	-.0619	.0317
120.000			.6486	.1328	-.2649	-.3441	.0071	.2014	.2279	-.3465	-.1728	.1197	.0255	-.0828	-.0024
135.000								.1445		-.0328		.0238		-.1084	
150.000			.5782	.0616	-.3252	-.4030	-.3652	.1281	.1317	.2280	.2189	-.1577	-.1844	-.2251	-.0487
165.000				-.0126	-.3849	-.4568	-.4255	.1251	.1380	.3015	.2265	-.2007	-.1692	-.2468	-.0448
180.000	1.0940	.8996	.4453	-.0669	-.4205	-.4943	-.3844	.0753	.1675	.3130	.1831	-.4023	-.2167	-.2675	-.0748
270.000		.6876							.6089						

X/LT	.7460	.8530	.9280
PHI			

ARC1I-715 IA14 01+T12+S12N25+AT11 EXTERNAL TANK (RB1T18)

MACH (2) = .970 BETAO (1) = -8.050

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0147	.0014	-.1880
30.000	.0178	.0396	.1553
60.000	.0821	.1337	-.0241
90.000	.1259	.1034	
120.000	.1965	.1686	.3854
135.000	.2049	.2442	.3802
150.000	.1615	.2240	.3139
165.000	.1741	.2274	.3985
180.000	.1345	.1827	.1436

MACH (2) = .976 BETAO (2) = -4.010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1150	.1730	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1470	.8752	.4503	-.0757	-.4368	-.5073	-.5111	.0162	.1110	-.0384	-.2851	-.3656	-.0021	-.0022	-.0019
30.000			.5035	-.0198	-.3951	-.4696	-.5138	.0774	.1079	-.1432	-.3064	-.2070	-.0507	-.0435	-.0278
60.000			.5517	.0270	-.3565	-.4194	-.3430	.2133	.2061	-.4308	-.4983	-.1876	-.1290	-.0546	.0272
90.000		1.0000	.5752	.0529	-.3354	-.4132	-.0659	.3641	.4927		-.0238	-.6650	-.2015	-.0761	.0192
120.000			.5597	.0411	-.3468	-.4197	-.1962	.2472	.2652	-.2892	-.2566	-.0106	-.0482	-.1448	-.0453
135.000								.2230		.0219		-.1170		-.1718	
150.000			.5311	.0087	-.3739	-.4409	-.3751	.1795	.1900	.2450	.0334	-.2039	-.1971	-.2659	-.0830
165.000				-.0275	-.3939	-.4680	-.2622	.0910	.1897	.3050	.1677	-.3127	-.1871	-.2692	-.0560
180.000	1.1470	.9166	.4068	-.0563	-.4205	-.4875	-.1311	.0775	.2067	.3020	.1824	-.4292	-.1799	-.2556	-.0739
270.000		.7981							.5550						

X/LT	.7460	.8530	.9280
PHI			
.000	.0320	.0324	-.1635
30.000	0394	.0638	-.1399
60.000	.0830	.1213	-.0411
90.000	.1219	.1317	
120.000	.1658	.1330	.2638
135.000	.1713	.2042	.2945
150.000	.1418	.1908	.2205
165.000	.1582	.2013	.3003
180.000	.1355	.1696	.0859

ARC11-718 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1718)

MACH (2) = .975 BETAO (3) = .040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1620	.8879	.4543	-.0726	-.4303	-.5029	-.5634	.0148	.1331	-.0244	-.2776	-.3852	.0112	.0151	.0137
30.000			.4587	-.0688	-.4303	-.5042	-.4233	.0129	.1611	-.0918	-.3187	-.3320	-.0135	-.0072	.0016
60.000			.4590	-.0671	-.4268	-.4836	-.2255	.1963	.2386	-.3822	-.5097	-.2295	-.0497	-.0283	-.0030
90.000		.9054	.4644	-.0583	-.4216	-.4836	-.0479	.3849	.5068		-.6983	-.5423	-.1582	-.0691	.0044
120.000			.4680	-.0523	-.4203	-.4689	-.2346	.2630	.3017	-.2219	-.2571	-.1163	-.1080	-.1772	-.0348
135.000								.1647		.0653		-.1918		-.2148	
150.000			.4762	-.0484	-.4178	-.4811	-.1290	.1136	.2349	.2428	-.1353	-.3547	-.2104	-.3144	-.0984
165.000				-.0481	-.4102	-.4871	-.1258	.0896	.2162	.2909	.0908	-.4194	-.1563	-.2508	-.0556
180.000	1.1620	.9158	.4754	-.0479	-.4167	-.4863	-.0694	.0258	.1962	.2909	.1891	-.4841	-.1415	-.2270	-.0597
270.000		.9016							.5126						

X/LT	.7460	.8530	.9280
PHI			
.000	.0467	.0505	-.1590
30.000	.0445	.0570	-.1496
60.000	.0613	.0930	-.0657
90.000	.1028	.1141	
120.000	.1275	.0729	.1739
135.000	.1289	.1201	.1218
150.000	.0960	.1056	.0491
165.000	.1231	.1275	.0834
180.000	.1226	.1286	-.0621

MACH (2) = .976 BETAO (4) = 4.070

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1470	.8692	.4457	-.0766	-.4335	-.5061	-.5822	-.0084	.1226	-.0389	-.2821	-.3600	-.0087	-.0038	.0012
30.000			.3939	-.1262	-.4665	-.5313	-.4452	.0488	.1713	-.0541	-.3426	-.3492	-.0006	-.0077	-.0005
60.000			.3650	-.1581	-.4833	-.5480	-.1245	.0723	.2920	-.3224	-.4799	-.2298	-.0388	-.0148	.0001
90.000		.8019	.3588	-.1542	-.4931	-.5391	-.0339	.3292	.5296		-.6820	-.1522	-.0183	-.0624	-.0481
120.000			.3752	-.1408	-.4768	-.5470	-.0806	.0676	.3519	-.1455	-.2166	-.1484	-.1366	-.1870	-.0444
135.000								.0238		.1113		-.2293		-.2209	
150.000			.4144	-.1147	-.4549	-.5248	-.0600	.0230	.2419	.2274	-.2114	-.4658	-.3102	-.3296	-.0782
165.000				-.0743	-.4335	-.5061	-.1085	.0575	.2173	.2793	.0749	-.5260	-.1709	-.2291	-.0793
180.000	1.1470	.9195	.4730	-.0494	-.4170	-.4883	-.1607	.0558	.1818	.2987	.2031	-.4506	-.1546	-.2704	-.0799
270.000		1.0000							.4924						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T18)

MACH (2) = .976 BETAO (4) = 4.070

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0298	.0372	-.1583
30.000	.0402	.0550	-.1531
60.000	.0470	.0708	-.0451
90.000	.0509	.0863	
120.000	.0859	.0651	.0344
135.000	542	.0872	-.0217
150.000	.0634	.0277	-.1369
165.000	.0915	.0983	.1018
180.000	.0962	.1106	-.0668

MACH (2) = .974 BETAO (5) = 8.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	4510	.5050	.5580	.6380
PHI															
.000	1.0920	.8175	.4076	-.1005	-.4536	-.5252	-.6099	-.0389	.0481	-.1053	-.3030	-.2829	-.0628	-.0545	-.0587
30.000			.3141	-.1909	-.5237	-.5741	-.2009	-.1026	.1438	-.0574	-.3476	-.2623	-.0125	-.0232	-.0245
60.000			.2676	-.2349	-.5490	-.5592	-.1246	.0398	.2652	-.2957	-.4914	-.1832	-.0526	-.0335	-.0245
90.000		.6898	.2541	-.2420	-.5566	-.6006	-.0560	.2101	.5540		-.6537	-.1338	-.0340	-.1043	-.1200
12 .000			.2738	-.2222	-.5476	-.1629	-.0882	-.0555	.2460	-.0909	-.2685	-.1982	-.1925	-.2057	-.0923
135.000								-.0195		.0808		-.3098		-.2292	
150.000			.3289	-.1829	-.5137	-.2841	-.0692	-.0310	.1962	.2061	-.2375	-.5912	-.3470	-.3292	-.1365
165.000				-.1284	-.4751	-.5421	-.0893	.0075	.1559	.2518	.0485	-.6711	-.2323	-.2527	-.1417
180.000	1.0921	.8052	.4452	-.0746	-.4343	-.5063	-.1290	.0604	.1101	.2600	.1911	-.4591	-.2742	-.3386	-.1470
270.000		1.0850							.4712						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0178	-.0090	-.1926
30.000	.0127	.0186	-.1725
60.000	.0171	.0364	-.0617
90.000	-.0308	.0164	
120.000	.0316	.0304	.0206
135.000	.0250	.0666	-.0311
150.000	.0051	-.0083	-.1402
165.000	.0202	.0614	.1490
180.000	.0068	.0518	-.0815

ARC11-716 Ia.4 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T18)

MACH (3) = 1.102 BETAO (1) = -8.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1790	.9218	.5380	.0570	-.2791	-.3464	-.4203	-.3438	.1326	.0478	-.1558	-.1783	-.1727	-.0813	-.0533
30.000			.6435	.1551	-.2010	-.2769	-.3567	-.2176	.1124	-.0906	-.2574	-.0994	-.1048	-.1253	-.0684
60.000			.7384	.2412	-.1310	-.2049	-.2421	.1735	.2572	-.2848	-.3169	-.1372	-.1329	.0105	.0142
90.000		1.1690	.7812	.2860	-.0965	-.1752	-.2506	.4066	.5648		-.5195	-.4043	-.1531	-.0540	-.0219
120.000			.7511	.2616	-.1188	-.1960	-.2661	.1861	.3120	-.1993	-.0919	.2310	.1572	.0331	-.0255
135.000								.0602		.0195		.1204		.0249	
150.000			.6867	.1958	-.1702	-.2456	-.3418	-.2323	.1952	.3206	.2557	-.0388	-.0263	-.1008	-.0769
165.000				.1266	-.2244	-.2963	-.3790	-.2906	.1908	.3752	.3162	-.0268	-.0151	-.1315	-.1058
180.000	1.1790	.9976	.5659	.0773	-.2572	-.3251	-.3979	-.1478	.1870	.3959	.2868	-.1791	-.1033	-.2289	-.1451
270.000		.7983							.6899						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0450	.0521	-.0531
30.000	-.0234	.0920	-.0230
60.000	.0331	.1921	.0983
90.000	.0809	.1492	
120.000	.1443	.2242	.4735
135.000	.1515	.3021	.4523
150.000	.1298	.2835	.4081
165.000	.1384	.2784	.4735
180.000	.1022	.2311	.2324

MACH (3) = 1.100 BETAO (2) = -4.010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2200	.9658	.5631	.0608	-.2683	-.3339	-.4122	-.3577	.1723	.1207	-.1047	-.2213	-.1098	.0179	-.0036
30.000			.6120	.1140	-.2316	-.3047	-.3828	-.3171	.1918	.0099	-.1866	-.1414	-.0861	-.0297	-.0356
60.000			.6589	.1561	-.2008	-.2708	-.3233	-.0183	.2945	-.2495	-.3583	-.0986	-.0796	-.0689	.0113
90.000		1.0850	.6780	.1800	-.1842	-.2581	-.3425	.2861	.5733		-.5015	-.4725	-.1449	-.0635	-.0230
120.000			.6658	.1724	-.1936	-.2668	-.3515	.0847	.3581	-.1308	-.0891	.0996	.0889	-.0077	-.0743
135.000								-.2602		.1358		-.0095		-.0156	
150.000			.6401	.1423	-.2153	-.2851	-.3726	-.2958	.2806	.3527	.1345	-.0671	-.0294	-.1332	-.1321
165.000				.1063	-.2380	-.3060	-.3926	-.2266	.2340	.4054	.2793	-.1029	-.0379	-.1572	-.1145
180.000	1.2200	1.0070	.5784	.0785	-.2512	-.3245	-.4003	-.0414	.1915	.3849	.3120	-.1900	-.0353	-.1186	-.1247
270.000		.8940							.6305						

X/LT	.7480	.8530	.9280
PHI			

ARC11-716 IA14 D1+T12+S12N25+AT11 EXTERNAL TANK (RB1T18)

MACH (3) = 1.100 BETAO (2) = -4.010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0412	.0671	-.0350
30.000	-.0461	.0860	-.0061
60.000	-.0036	.1462	.0668
90.000	.0349	.1474	
120.000	.0720	.1521	.3604
135.000	.0802	.2324	.3614
150.000	.0717	.2252	.3097
165.000	.0837	.2334	.3645
180.000	.0658	.2022	.1766

MACH (3) = 1.102 BETAO (3) = .030

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2390	.9827	.5686	.0675	-.2612	-.3293	-.4054	-.3543	.1604	.1499	-.0701	- 2033	-.0703	.0449	.0206
30.000			.5726	.0680	-.2600	-.3306	-.4032	-.3509	.1517	.0998	-.1429	-.2176	-.0362	.0318	.0084
60.000			.5716	.0703	-.2574	-.3240	-.4109	-.0429	.3282	-.1888	-.3331	-.0992	-.0078	-.0147	-.0370
90.000		.9965	.5786	.0814	-.2546	-.3220	-.4027	.1000	.5921		-.5239	-.4500	-.1295	-.0765	-.0445
120.000			.5814	.0863	-.2544	-.3215	-.3791	-.0432	.3952	-.0626	-.0857	.0337	.0175	-.0525	-.1282
135.000								-.1049		.2012		-.0476		-.0811	
150.000			.5896	.0855	-.2511	-.3157	-.4050	-.1091	.2469	.3734	.0216	-.1772	-.0541	-.1872	-.2090
165.000				.0887	-.2452	-.3177	-.3978	-.0558	.2158	.3770	.2590	-.1874	-.0270	-.1319	-.1471
180.000	1.2330	1.0090	.5893	.0895	-.2516	-.3177	-.3986	-.0284	.1946	.3694	.3331	-.2378	-.0001	-.1184	-.1428
270.000		.9914							.5971						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0383	.0675	-.0109
30.000	-.0480	.0719	-.0079
60.000	-.0339	.1071	.0458
90.000	.0232	.1173	
120.000	.0618	.0918	.2309
135.000	.0526	.1543	.1755
150.000	.0313	.1387	.1035
165.000	.0560	.1587	.1893
180.000	.0593	.1809	.0754

ARC11-716 IA14 C1+T12+S12N25+AT11 EXTERNAL TANK (RB1T18)

MACH (3) = 1.100 BETAO (4) = 4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6360
PHI															
.000	1.2220	.9695	.5499	.0641	-.2690	-.3336	-.4 .1	-.3587	.1754	.1345	-.0966	-.2242	-.1165	.0874	.0009
30.000			.5111	.0299	-.2981	-.3613	-.4299	-.3451	.2332	.1168	-.1640	-.2547	-.0588	.0243	-.0067
60.000			.4835	.0057	-.3155	-.3726	-.4524	-.0130	.3684	-.1222	-.5037	-.1483	-.0529	-.0026	-.0239
90.000		.9005	.4761	.0133	-.3161	-.3805	-.2338	.0067	.6169		-.5099	-.1032	-.0524	-.0541	-.0754
120.000			.4955	.0154	-.3131	-.3741	-.4395	.0181	.3623	.0088	-.2485	-.0119	-.0403	-.1115	-.1487
135.000								.0129		.2415		-.0960		-.1502	
150.000			.5287	.0353	-.2899	-.3503	-. 198	.0183	.1510	.3070	-.0258	-.3359	-.1483	-.2901	-.2217
165.000				.0619	-.2600	-.3366	-.4190	.0208	.1921	.3290	.2259	-.2901	-.0403	-.1333	-.1469
180.000	1.2220	1.0120	.5348	.0956	-.2525	-.3191	-.4031	-.0227	.2100	.3422	.3375	-.2404	-.0070	-.1697	-.1559
270.000		1.0890							.5719						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0454	.0394	-.0267
30.000	-.0298	.0868	-.0198
60.000	-.0247	.1012	.0584
90.000	.0094	.1203	
120.000	.0255	.0919	.0638
135.000	.0066	.0976	.0229
150.000	-.0011	.0618	-.0717
165.000	.0229	.1109	.1569
180.000	.0303	.1313	.0055

MACH (3) = 1.100 BETAO (5) = 8.130

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6360
PHI															
.000	1.1720	.9172	.5329	.0500	-.2816	-.3464	-.4254	-.3772	.0953	.0444	-.1483	-.1842	-.1978	-.0771	-.0326
30.000			.4439	-.0260	-.3425	-.4016	-.4657	-.1680	.1145	.0934	-.1626	-.2905	-.1034	-.0.41	-.0042
60.000			.4026	-.0621	-.3665	-.4176	-.4783	-.0232	.2590	-.0852	-.3158	-.1550	-.0571	-.0318	-.0270
90.000		.7904	.3860	-.0764	-.3691	-.4269	-.4668	.0546	.6155		-.5093	-.2121	-.0940	-.0999	-.0751
120.000			.4064	-.0496	-.3603	-.4183	-.1063	-.0561	.1324	.0899	-.0887	-.0887	-.1111	-.1777	-.1610
135.000								-.0293		.1448		-.1898		-.2148	
150.000			.4565	-.0216	-.3349	-.3960	-.0764	-.0124	.1200	.2831	-.0473	-.4648	-.2374	-.3795	-.2032
165.000				.0250	-.3012	-.3646	-.4346	-.0111	.1594	.2864	.1755	-.4501	-.0899	-.2020	-.2075
180.000	1.1720	.9143	.5638	.0744	-.2656	-.3322	-.4139	.0232	.1533	.2943	.2902	-.2359	-.1091	-.2736	-.2344
270.000		1.1670							.5607						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 C1+T12+S12N25+AT11 EXTERNAL TANK (RB1T18)

MACH (3) = 1.100 BETAO (5) = 8.130

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0492	.0437	-.0543
30.000	-.0323	.0736	-.0393
60.000	-.0382	.0946	.0757
90.000	-.0336	.0910	
120.000	-.0157	.0647	.0982
135.000	-.0349	.0859	.0453
150.000	-.0370	.0427	-.1003
165.000	-.0263	.0657	.2039
180.000	-.0337	.0693	-.0349

MACH (4) = 1.252 BETAO (1) = -8.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PHI															
.000	1.2530	.9780	.5864	.1245	-.1849	-.2429	-.3113	-.2879	-.1908	.1213	-.0456	-.1528	-.1634	-.1682	-.0783
30.000			.6943	.2149	-.1115	-.1786	-.2528	-.2235	.0861	-.0711	-.2801	-.1033	-.0890	-.1047	-.1002
60.000			.7900	.3014	-.0449	-.1128	-.2035	-.1349	.3133	-.1383	-.3367	-.1653	-.1634	-.0443	.0269
90.000		1.2350	.8353	.3464	-.0124	-.0831	-.1729	.1111	.6174		-.4448	-.4296	-.2469	-.0815	-.0183
120.000			.8041	.3210	-.0332	-.1039	-.1892	-.1241	.3273	-.0937	-.1619	.0096	.2285	.1503	.0133
135.000								-.1634		-.0429		.0196		.1456	
150.000			.7376	.2566	-.0826	-.1487	-.2370	-.1911	.1523	.1683	.1951	-.0265	.0567	.0127	-.0454
165.000				.1937	-.1310	-.1971	-.2736	-.2401	.0240	.4127	.3105	.0998	-.1331	-.0605	-.0799
180.000	1.2530	1.0370	.6150	.1510	-.1638	-.2234	-.2934	-.2541	-.0326	.4342	.2973	.0054	-.1802	-.0611	-.0920
270.000		.8460							.6623						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0341	-.0123	-.0092
30.000	-.0428	.0214	.0382
60.000	.0006	.1096	.1526
90.000	-.0277	.0592	
120.000	-.0207	.2054	.5091
135.000	.0180	.2865	.4786
150.000	.0261	.2867	.4319
165.000	.0350	.2828	.5106
180.000	.0518	.2461	.3112

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T18)

MACH (4) = 1.244 BETAO (2) = -4.030

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3020	1.0300	.6200	.1468	-.1714	-.2325	-.3034	-.2740	-.2041	.2017	.0184	-.1487	-.1778	-.1151	-.0046
30.000			.6696	.1885	-.1368	-.2028	-.2734	-.2420	.0907	.0494	-.1647	-.1450	-.0871	-.0799	-.0446
60.000			.7151	.2242	-.1047	-.1684	-.2563	-.1907	.3158	-.1214	-.3380	-.1517	-.0538	-.1052	-.0191
90.000		1.1530	.7373	.2476	-.0893	-.1559	-.2404	-.1592	.6066		-.4536	-.4369	-.3035	-.0749	-.0606
120.000			.7247	.2394	-.0977	-.1624	-.2428	-.1779	.3430	-.0477	-.1245	-.0568	.1139	.0651	-.0658
135.000								-.2043		.1008		-.1114		.0899	
150.000			.6969	.2142	-.1162	-.1617	-.2676	-.2186	.1746	.3693	.1667	-.0808	-.0831	-.0383	-.0839
165.000				.1862	-.1409	-.2047	-.2827	-.2461	.1419	.4038	.2963	.0446	-.0924	-.0970	-.0623
180.000	1.3020	1.0690	.6373	.1607	-.1547	-.2203	-.2925	-.2498	.0953	.3214	.3456	-.0059	-.2334	-.0850	-.1216
270.000		.9551							.6433						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0143	-.0165	-.0027
30.000	-.0335	.0057	.0329
60.000	.0021	.0718	.1090
90.000	-.0374	.0958	
120.000	-.0764	.1419	.4105
135.000	-.0400	.2277	.4029
150.000	-.0252	.2343	.3117
165.000	-.0146	.2391	.4318
180.000	.0060	.2088	.2567

MACH (4) = 1.249 BETAO (3) = .030

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3180	1.0450	.6215	.1498	-.1636	-.2243	-.2952	-.2650	-.1856	.2113	.0422	-.1425	-.2002	-.0754	.0157
30.000			.6268	.1509	-.1609	-.2243	-.2946	-.2650	.0551	.1548	-.0894	-.1645	-.1265	-.0682	.0086
60.000			.6307	.1540	-.1604	-.2191	-.2991	-.2376	.3035	-.0804	-.2779	-.1787	-.0374	-.0368	-.0563
90.000		1.0600	.6357	.1632	-.1581	-.2191	-.2940	-.2247	.6127		-.4525	-.4120	-.3016	-.0740	-.0785
120.000			.6383	.1669	-.1534	-.2159	-.2896	-.2315	.3653	.0180	-.0573	-.1286	-.0078	.0141	-.1000
135.000								-.2476		.2245		-.1473		.0162	
150.000			.6456	.1690	-.1529	-.2115	-.2956	-.2444	.1911	.3823	.0759	-.1635	-.1544	-.0632	-.1530
165.000				.1667	-.1508	-.2107	-.2901	-.2560	.1858	.3386	.3331	-.0501	-.0994	-.0489	-.1003
180.000	1.3180	1.0690	.6430	.1660	-.1497	-.2131	-.2896	-.2315	.1088	.3260	.3325	-.0629	-.1174	-.0388	-.0751
270.000		1.0540							.6222						

X/LT	.7460	.8530	.9280
PHI			

DATE 06 JAN 75 TABULATED PRESSURE DATA - IA14A - VOL. 9

ARC11-716 IA14 01+T12+S12N25+AT11 EXTERNAL TANK (RB1T18)

MACH (4) = 1.249 BETAO (3) = .030

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0065	.0025	.0164
30.000	-.0025	.0064	.0214
60.000	-.0236	.0382	.0843
90.000	-.0236	.0798	
120.000	-.0499	.0895	.2644
135.000	-.0233	.1584	.2049
150.000	-.0361	.1518	.0940
165.000	-.0104	.1694	.2675
180.000	-.0004	.1684	.1742

MACH (4) = 1.246 BETAO (4) = 4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3000	1.0250	.6117	.1459	-.1708	-.2317	-.3053	-.2751	-.1844	.1952	.0279	-.1466	-.1839	-.1151	-.0032
30.000			.5669	.0990	-.2011	-.2607	-.3243	-.2907	.0560	.1794	-.0570	-.1903	-.1708	-.0680	-.0027
60.000			.5404	.0740	-.2175	-.2719	-.3462	-.2992	.1580	-.0220	-.2394	-.1935	-.0531	-.0462	-.0206
90.000		.9609	.5358	.0738	-.2229	-.2763	-.3248	-.2215	.6195		-.4662	-.3591	-.2714	-.1113	-.0909
120.000			.5492	.0874	-.2117	-.2714	-.3383	-.2946	.2157	.0910	-.0198	-.0945	-.0773	-.0387	-.1388
135.000								-.2940		.2657		-.1754		-.0800	
150.000			.5846	.1155	-.1951	-.2516	-.3309	-.2854	.1462	.2378	.0982	-.3381	-.1825	-.1537	-.2170
165.000				.1441	-.1706	-.2362	-.3113	-.2756	.1668	.3031	.2802	-.1389	-.1399	-.0458	-.1261
180.000	1.3000	1.0700	.6397	.1663	-.1565	-.2213	-.2981	-.2119	.1249	.2800	.3797	-.0780	-.0752	-.0806	-.1171
270.000		1.1480							.6190						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0081	-.0201	.0037
30.000	-.0018	-.0048	.0300
60.000	-.0086	.0305	.0882
90.000	.0027	.0502	
120.000	-.0026	.0839	.0797
135.000	-.0221	.0902	.0527
150.000	-.0317	.0662	-.0404
165.000	-.0124	.1108	.1852
180.000	-.0278	.1310	.0566

ARC11-716 IA14 01+T12+S12N25+AT11 EXTERNAL TANK (RB1T18)

MACH (4) = 1.248 BETAO (5) = 6.150

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2530	.9749	.5820	.1206	-.1884	-.2475	-.3190	-.2951	-.1353	.0941	-.0405	-.1513	-.1661	-.1671	-.0613
30.000			.4943	.0459	-.2454	-.2977	-.3565	-.3238	.0645	.1085	-.0721	-.2304	-.1900	-.0904	-.0126
60.000			.4516	.0022	-.2653	-.3131	-.3900	-.3228	.0540	.0192	-.1998	-.1863	-.0915	-.0458	-.0073
90.000		.8511	.4381	-.0025	-.2702	-.3209	-.3776	-.1844	.6204		-.4536	-.2285	-.2101	-.0814	-.0512
120.000			.4551	.0158	-.2613	-.3141	-.3750	-.0753	.0070	.1440	-.0179	-.0873	-.1440	-.0721	-.1625
135.000								-.1132		.1311		-.1826		-.1414	
150.000			.5067	.0527	-.2418	-.2909	-.3679	-.2603	.1083	.2018	.0395	-.4072	-.2202	-.2807	-.2132
165.000				.0997	-.2027	-.2662	-.3404	-.3051	.1235	.2468	.2232	-.2814	-.0885	-.1401	-.1612
180.000	1.2530	.9700	.6143	.1419	-.1731	-.2347	-.3115	-.2018	.1072	.2203	.3025	-.0764	-.0649	-.2154	-.2071
270.000		1.2320							.6247						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0196	-.0200	-.0049
30.000	.0098	-.0015	.0124
60.000	.0027	.0008	.1195
90.000	-.0107	.0609	
120.000	-.0337	.0567	.1497
135.000	-.0543	.0724	.0786
150.000	-.0617	.0504	-.0881
165.000	-.0538	.0592	.2213
180.000	-.0821	.0631	.0132

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (R81T24) (28 SEP 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES
LREF = 38.7090 INCHES YMRP = .0000 INCHES
BREF = 38.7090 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAO = -10.000 ELEVON = .000
RUDDER = .000 SPOBRK = .000

MACH (1) = .902 BETAO (1) = -9.890

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.8865	.4607	.3647	-.4272	-.6387	-.6603	-.1719	-.0760	-.0782	-.1799	-.3408	-.2170	-.1350	-.1089	-.0649
30.000			.1801	-.3115	-.6057	-.6185	-.5302	-.2100	-.2760	-.4384	-.5599	-.2488	-.1531	-.1260	-.0990
60.000			.3761	-.1186	-.4001	-.3732	-.2942	-.2330	-.3342	-.5583	-.7408	-.4089	-.0533	.0447	-.0208
90.000		.9691	.6088	.1135	-.1793	-.1374	.0450	.1991	.2176		-.7011	-.7580	-.1844	-.0255	-.0389
120.000			.7602	.2684	-.0481	-.0361	.0896	.2879	.3934	.1322	.1547	.0622	-.0237	.0111	.0680
135.000								.2444		.2880		.0322		-.0181	
150.000			.7846	.2859	-.0408	-.0454	.0581	.2102	.2958	.4275	.3356	-.0312	-.2482	-.1534	-.0525
165.000				.2289	-.1030	-.1139	-.0020	.1394	.2499	.4066	.3543	-.1097	-.2703	-.1858	-.0698
180.000	.8865	1.0480	.6381	.1430	-.1734	-.1858	-.0526	.0912	.2145	.3607	.2951	-.6540	-.3296	-.2677	-.1249
270.000		.4592							.2332						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0646	-.1015	-.3184
30.000	-.1049	-.0867	-.2618
60.000	-.0888	-.1609	-.1893
90.000	-.2371	-.3741	
120.000	.1211	-.2691	.5993
135.000	.1292	.0007	.3279
150.000	.0468	.0888	.3584
165.000	.0426	.0986	.4631
180.000	-.0008	.0533	.2888

MACH (1) = .899 BETAO (2) = 10.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.8789	.4466	.0577	-.4273	-.6902	-.6102	-.1382	-.0768	-.0799	-.1704	-.3410	-.2200	-.1341	-.1085	-.0566
30.000			.0236	-.4430	-.6914	-.1824	-.0503	.0333	.0305	-.1099	-.3578	-.2755	-.1040	-.0624	-.0549
60.000			.0292	-.4413	-.4721	-.1437	-.0251	.0460	-.0100	-.2899	-.5675	-.4693	-.1090	-.0080	-.0118
90.000		.4612	.0684	-.4128	-.6425	-.1611	.0191	.1932	.2440		-.5756	-.8329	-.2257	-.0504	-.0270
120.000			.1805	-.2972	-.5801	-.4446	-.0765	.1319	.3480	.1179	-.1311	-.3281	-.2782	-.2123	-.1404
135.000								.0401		.1348		-.4066		-.2782	
150.000			.3663	-.1251	-.4334	-.4374	-.1786	.0028	.1704	.1267	-.3884	-.6501	-.4309	-.3041	-.1967

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T24)

MACH (1) = .899 BETAO (2) = 10.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
165.000				.0316	-.2921	-.2938	-.1501	.0119	.1643	.2173	.1352	-.3595	-.3784	-.3327	-.1873
180.000	.8789	.9208	.6340	.1384	-.1871	-.1904	-.0497	.0744	.1761	.3039	.2604	-.3911	-.4835	-.3544	-.2184
270.000		.9530							.1988						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0681	-.1015	-.3253
30.000	-.0584	-.0946	-.3458
60.000	-.0364	-.0716	-.2223
90.000	-.0540	-.1188	
120.000	-.0661	-.1595	.0963
135.000	-.0572	-.0859	-.0772
150.000	-.1244	-.1560	-.1898
165.000	-.0901	-.0779	.0246
180.000	-.1289	-.0908	.0484

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T25) (28 SEP 75)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES
LREF = 38.7090 INCHES YMRP = .0000 INCHES
BREF = 38.7090 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAO = -6.000 ELEVON = .000
RUDDER = .000 SPDBRK = .000

MACH (1) = .899 BETAO (1) = -9.930

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9231	.5154	.1201	-.3767	-.6653	-.6899	-.1661	-.0778	-.0905	-.1871	-.2964	-.1921	-.1220	-.1055	-.0655
30.000			.2452	-.2575	-.5602	-.5765	-.4620	-.1839	-.2454	-.4510	-.4588	-.2268	-.1426	-.1258	-.0857
60.000			.4312	-.0681	-.3626	-.3354	-.2388	-.1394	-.2311	-.5719	-.6875	-.3229	-.0526	.0507	.0002
90.000		1.0050	.6301	.1307	-.1674	-.1247	.0603	.2294	.2777		-.6697	-.6320	-.0998	-.0030	-.0069
120.000			.7423	.2434	-.0706	-.0570	.0861	.3640	.3509	.0560	.1332	.0531	-.0158	.0048	.0614
135.000								.2126		.2437		.0249		-.0234	
150.000			.7398	.2377	-.0913	-.0987	.0129	.1760	.2540	.3974	.3149	-.0447	-.2463	-.1558	-.0506
165.000				.1663	-.1631	-.1776	-.0451	.1063	.2153	.3786	.3391	-.1101	-.2795	-.1987	-.0570
180.000	.9231	1.0100	.5816	.0824	-.2317	-.2382	-.0798	.0670	.1908	.3399	.2804	-.6699	-.3345	-.2604	-.1183
270.000		.5004							.3188						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0715	-.1046	-.3234
30.000	-.0961	-.0880	-.2691
60.000	-.0459	-.0890	-.1658
90.000	-.1198	-.3454	
120.000	.1255	-.1830	.6378
135.000	.1333	.0474	.3412
150.000	.0541	.1268	.3919
165.000	.0573	.1257	.4746
180.000	.0132	.0757	.2887

MACH (1) = .898 BETAO (2) = 10.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9192	.5055	.1072	-.3830	-.6651	-.6896	-.1740	-.0854	-.0926	-.1802	-.2964	-.1839	-.1254	-.1004	-.0644
30.000			.0585	-.4157	-.6756	-.2468	-.0604	.0392	.0335	-.1272	-.3287	-.2132	-.0833	-.0639	-.0666
60.000			.0561	-.4191	-.5795	-.1350	-.0038	.0766	.0328	-.2742	-.5830	-.3548	-.0689	-.0247	-.0278
90.000		.5021	.0885	-.3938	-.6215	-.1381	.0378	.2146	.3232		-.5894	-.4711	-.1492	-.0419	-.0352
120.000			.1825	-.3006	-.6007	-.2924	-.0447	.1520	.3303	.0482	-.1576	-.3407	-.2444	-.2060	-.1364
135.000								.0625		.1202		-.4200		-.2646	
150.000			.2111	-.4233	-.6774	-.4051	-.1508	.0002	.1776	.1687	-.3847	-.6573	-.4111	-.2975	-.1836

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T25)

MACH (1) = .898 BETAO (2) = 10.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
165.000				-.0282	-.3524	-.3450	-.1520	.0055	.1475	.2067	.1142	-.3751	-.3759	-.3336	-.1813
180.000	.9192	.8733	.5803	.0705	-.2570	-.2515	-.0842	.0495	.1485	.2734	.2426	-.6029	-.4842	-.3610	-.2122
270.000		.9955							.2647						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0743	-.1023	-.3282
30.000	-.0548	-.0857	-.3356
60.000	-.0368	-.0646	-.2119
90.000	-.0432	-.1033	
120.000	-.0583	-.1352	.1107
135.000	-.0501	-.0638	-.0567
150.000	-.1087	-.1318	-.1757
165.000	-.0795	-.0562	.0491
180.000	-.1164	-.0679	.0666

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T26) (26 SEP 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES
LREF = 38.7090 INCHES YMRP = .0000 INCHES
BREF = 38.7090 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAO = -6.000 ELEVON = .000
RUDDER = .000 SPOBRK = .000

MACH (1) = .897 BETAO (1) = -9.940

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9565	.5718	.1682	-.3310	-.6351	-.6646	-.1659	-.0852	-.0931	-.1977	-.2795	-.1748	-.1238	-.1029	-.0820
30.000			.3014	-.1977	-.5174	-.5325	-.3655	-.1608	-.2040	-.4843	-.4174	-.2046	-.1356	-.1133	-.0896
60.000			.4832	-.0251	-.3352	-.3014	-.1796	-.0684	-.1431	-.5976	-.6724	-.2642	-.0285	.0278	.0063
90.000		1.0350	.6490	.1408	-.1671	-.1206	.0765	.2477	.3319		-.6543	-.5682	-.1145	-.0067	.0088
120.000			.7216	.2161	-.1053	-.0881	.0714	.2385	.3107	-.0581	.1059	.0484	-.0173	.0017	.0390
135.000								.1802		.1882		.0120		-.0320	
150.000			.6924	.1813	-.1551	-.1479	-.0410	.1397	.2074	.3549	.2860	-.0729	-.2527	-.1641	-.0503
165.000				.0996	-.2336	-.2342	-.0833	.0741	.1811	.3536	.3225	-.1198	-.2773	-.1995	-.0501
180.000	.9565	.9715	.5274	.0255	-.3015	-.2929	-.1037	.0414	.1676	.3232	.2735	-.6915	-.3346	-.2604	-.1086
270.000		.5261							.3856						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0748	-.1102	-.3286
30.000	-.0874	-.0894	-.2820
60.000	-.0075	-.0244	-.1404
90.000	-.0390	-.2130	
120.000	.1348	-.0894	.6480
135.000	.1422	.0855	.3570
150.000	.0730	.1531	.4148
165.000	.0789	.1579	.4961
180.000	.0325	.1027	.3001

MACH (1) = .898 BETAO (2) = 10.070

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9534	.5618	.1629	-.3571	-.6382	-.6712	-.1784	-.0843	-.0944	-.1937	-.2926	-.1729	-.1167	-.0999	-.0718
30.000			.0986	-.3960	-.6640	-.3781	-.0660	.0368	.0391	-.1396	-.3171	-.2041	-.0771	-.0618	-.0583
60.000			.0851	-.3926	-.6361	-.1485	.0144	.1127	.0738	-.2707	-.5620	-.3395	-.0472	-.0242	-.0336
90.000		.5349	.1068	-.3928	-.6081	-.1242	.0596	.2337	.3937		-.5600	-.4888	-.1234	-.0279	-.0383
120.000			.1835	-.3110	-.5993	-.2336	-.0183	.1671	.3137	-.0124	-.1954	-.3338	-.2447	-.1922	-.1249
135.000								.0846		.1070		-.4165		-.2593	
150.000			.3010	-.1960	-.5081	-.4959	-.1279	.0335	.1817	.1390	-.3660	-.5425	-.4019	-.2980	-.1757

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1TE6)

MACH (1) = .898 BETAO (2) = 10.070

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1150	.1780	.1940	.2150	.2420	.2930	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
165.000				-.0752	-.4022	-.3973	-.1468	.0306	.1412	.2041	.0942	-.3742	-.3702	-.3261	-.1787
180.000	.9534	.8420	.5273	.3134	-.3166	-.3171	-.1035	.0315	.1280	.2561	.2295	-.3950	-.4940	-.3315	-.2105
270.000		1.0290							.3176						

X/LT	.7480	.9530	.9280
PHI			
.000	-.0763	-.1040	-.3357
30.000	-.0463	-.0716	-.3253
60.000	-.0369	-.0585	-.1969
90.000	-.0411	-.0699	
120.000	-.0455	-.1018	.1304
135.000	-.0347	-.0332	-.0323
150.000	-.0880	-.1043	-.1600
165.000	-.0639	-.0313	.0722
180.000	-.1021	-.0412	.0872

ARC11-P16 IA14 D1+T12+S12N25+AT10 EXTERNAL TANK (RB1T27) (28 S_ 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES
LREF = 38.7090 INCHES YMRP = .0000 INCHES
BREF = 38.7090 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAO = -4.000 ELEVON = .000
RUDDER = .000 SPOBRK = .000

MACH (1) = .899 BETAO (1) = -9.990

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L	.0000	.0080	.0490	.1130	.1780	1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9805	.6262	.2252	-.2785	-.6002	-.6374	-.1712	-.0831	-.0938	-.1963	-.2649	-.1652	-.1147	-.0982	-.0933
30.000			.3686	-.1380	-.4794	-.4909	-.3235	-.1252	-.1601	-.4577	-.3711	-.1684	-.1282	-.1019	-.0770
60.000			.5390	.0177	-.2982	-.2758	-.1279	.0011	-.0615	-.7114	-.5983	-.2201	-.0114	.0217	.0141
90.000		1.0570	.6624	.1524	-.1613	-.1118	.0868	.2683	.3748		-.5857	-.5341	-.0990	-.0226	.0119
120.000			.6928	.1864	-.1433	-.1113	.0468	.2095	.2652	-.2348	.0732	.0586	-.0087	-.0090	.0532
135.000								.1451		.1420		.0185		-.0384	
150.000			.6406	.1299	-.2010	-.2014	-.0703	.1045	.1647	.3244	.2667	-.0793	-.2448	-.1612	-.0382
165.000				.0410	-.2912	-.2924	-.1186	.0465	.1501	.3278	.3083	-.1140	-.2733	-.1955	-.0409
180.000	.9805	.9286	.4729	-.0339	-.3600	-.3267	-.1050	.0234	.1527	.3097	.2638	-.6633	-.3255	-.2459	-.0909
270.000		.5516							.4421						

X/L	.7480	.8530	.9280
PHI			
.000	-.0746	-.1033	-.3337
30.000	-.0773	-.0785	-.2902
60.000	.0156	.0237	-.1315
90.000	-.0024	-.1287	
120.000	.1472	-.0261	.6604
135.000	.1561	.1257	.3722
150.000	.0979	.1810	.4265
165.000	.0979	.1782	.5109
180.000	.0552	.1282	.3134

ARC11-716 IA14 OL+T12+S12N25+AT10 EXTERNAL TANK (RB1T28) (29 SEP 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES
LREF = 38.7090 INCHES YMRP = .0000 INCHES
BREF = 38.7090 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAO = .000 ELEVON = .000
RUDDER = .000 SPOBRK = .000

MACH (1) = 1.246 BETAO (1) = -10.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1950	.9387	.5573	.1008	-.2054	-.2650	-.3317	-.3126	-.1340	.0370	-.0877	-.1594	-.1734	-.1871	-.0549
30.000			.6973	.2206	-.1066	-.1764	-.2519	-.2228	.0711	-.1157	-.3916	-.0919	-.1173	-.1190	-.0977
60.000			.8212	.3373	-.0185	-.0887	-.1831	-.1173	.3005	-.1618	-.3367	-.1929	-.1820	-.0056	.0421
90.000		1.2700	.8833	.3968	.0262	-.0480	-.1386	.0801	.6239		-.4495	-.3995	-.2263	-.0895	.0070
120.000			.8479	.3650	.0025	-.0718	-.1602	-.0918	.3485	-.0999	-.1442	.1781	.2926	.1646	.0375
135.000								-.1366		-.0659		.1144		.1533	
150.000			.7627	.2857	-.0617	-.1291	-.2222	-.1726	.1548	-.0167	.2857	.0314	.1082	.0021	-.0059
165.000				.2045	-.1261	-.1920	-.2747	-.2403	.0226	.3878	.4663	.1909	-.0363	-.0758	-.0339
180.000	1.1950	1.0510	.6091	.1504	-.1695	-.2289	.3010	-.2717	.0549	.4363	.4761	-.1871	.0345	-.2261	-.1318
270.000		.7915							.6680						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0580	-.0562	-.0262
30.000	-.0363	-.0105	.0137
60.000	.0236	.1350	.1589
90.000	-.0074	.1041	
120.000	-.0020	.1136	.0191
135.000	.0408	.3100	.5738
150.000	.0518	.3390	.6196
165.000	.0554	.3295	.6325
180.000	.0900	.2762	.4574

MACH (1) = 1.245 BETAO (2) = -7.960

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2310	.9743	.5808	.1213	-.1905	-.2513	-.3180	-.2944	-.1656	.1154	-.0486	-.1635	-.1682	-.1568	-.0647
30.000			.6868	.2073	-.1188	-.1842	-.2635	-.2315	.0792	-.0784	-.2934	-.0955	-.0914	-.1012	-.1022
60.000			.7819	.2973	-.0509	-.1188	-.2102	-.1421	.3066	-.1511	-.3552	-.1734	-.1863	-.0301	.0221
90.000		1.2290	.8304	.3438	-.0177	-.0889	-.1743	-.1007	.6165		-.4647	-.4033	-.2556	-.0665	-.0185
120.000			.8060	.3235	-.0342	-.1054	-.1903	-.1228	.3492	-.0911	-.1202	.1153	.2245	.1295	-.0190
135.000								-.1633		-.0353		.0013		.1244	
150.000			.7427	.2655	-.0806	-.1477	-.2367	-.1913	.1624	.2158	.2821	.0201	.0524	-.0234	-.0425

ARC11-T16 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T20)

MACH (1) = 1.245 BETAO (2) = -7.960

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
165.000				.2006	-.1284	-.1951	-.2738	-.2395	.0362	.4205	.4560	.1520	-.0787	-.1084	-.0845
180.000	1.2310	1.0680	.6229	.1565	-.1599	-.2217	-.2936	-.2694	.0784	.4305	.4989	-.2237	-.1152	-.1873	-.1058
270.000		.8497							.6592						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0293	-.0030	.0001
30.000	-.0402	.0274	.0400
60.000	-.0018	.1198	.1495
90.000	-.0278	.1016	
120.000	-.0283	.1384	.7209
135.000	.0134	.2962	.5252
150.000	.0320	.3199	.5692
165.000	.0441	.3153	.6280
180.000	.0526	.2746	.4582

MACH (1) = 1.240 BETAO (3) = -6.020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2610	1.0080	.3991	.1323	-.1830	-.2439	-.3120	-.2841	-.2016	.1568	-.0157	-.1584	-.1696	-.1354	-.0262
30.000			.6783	.1967	-.1299	-.1960	-.2713	-.2414	.0819	-.0164	-.2368	-.1293	-.0812	-.0931	-.0769
60.000			.7486	.2581	-.0784	-.1474	-.2347	-.1688	.3091	-.1361	-.3581	-.1532	-.1095	-.0799	.0070
90.000		1.1920	7831	.2948	-.0541	-.1259	-.2082	-.1374	.5105		-.4674	-.4159	-.2798	-.0547	-.0412
120.000			.7638	.2789	-.0660	-.1358	-.2164	-.1535	.3520	-.0728	-.1077	.0023	.1716	.0946	-.0561
135.000								-.1869		.0417		-.0556		0997	
150.000			.7210	.2409	-.0979	-.1639	-.2509	-.2065	.1663	.3323	.2575	.0052	-.0052	-.0418	-.0695
165.000				.1959	-.1329	-.1986	-.2767	-.2426	.1031	.4225	.4698	.1090	-.1702	-.1250	-.0868
180.000	1.2610	1.0690	.6125	.1631	-.1562	-.2196	-.2901	-.2595	.0931	.3747	.5191	-.2519	-.2307	-.1682	-.0967
270.000		.9021							.6458						

X/LT	.7460	.8530	9280
PHI			
.000	-.0374	-.0069	.0131
30.000	-.0385	.0075	.0440
60.000	.0061	.0910	.1264
90.000	-.0243	.1016	
[illegible]	[illegible]	[illegible]	[illegible]

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T28)

MACH (1) = 1.246 BETAO (3) = -6.020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
165.000	.0175	.2910	.6088
180.000	.0441	.2555	.4481

MACH (1) = 1.247 BETAO (4) = -3.950

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2760	1.0240	.6115	.1395	-.1744	-.2342	-.3062	-.2755	-.1896	.192-	.0159	-.1514	-.1846	-.1009	-.0028
30.000			.6599	.1843	-.1398	-.2057	-.2767	-.2467	.0825	.0712	-.1876	-.1584	-.0856	-.0820	-.0489
60.000			.7075	.2222	-.1085	-.1714	-.2572	-.1927	.3117	-.1234	-.3403	-.1558	-.0548	-.1061	-.0208
90.000		1.1470	.7323	.2467	-.0911	-.1572	-.2372	-.1685	.6061		-.4587	-.1245	-.3004	-.0773	-.0605
120.000			.7244	.2419	-.0924	-.1608	-.2408	-.1788	.3614	-.0389	-.0770	-.0358	.1051	.0741	-.0773
135.000								-.2040		.1109		-.0667		.0859	
150.000			.7021	.2191	-.1131	-.1777	-.2629	-.2151	.2024	.3807	.1796	-.0252	-.0654	-.0505	-.0912
165.000				.1920	-.1373	-.1997	-.2767	-.2423	.1581	.4015	.4512	.0544	-.2030	-.1023	-.0781
180.000	1.2760	1.0750	.6432	.1681	-.1504	-.2148	-.2847	-.2418	.1020	.3218	.5137	-.2431	-.2568	-.0458	-.1307
270.000		.9560							.6436						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0102	-.0082	-.0007
30.000	-.0316	.0106	.0332
60.000	.0028	.0830	.1025
90.000	-.0334	.1126	
120.000	-.0737	.1123	.6222
135.000	-.0301	.2472	.4691
150.000	-.0072	.2716	.4717
165.000	.0095	.2721	.5315
180.000	.0250	.2407	.4080

ARC11-715 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T28)

MACH (1) = 1.246 BETAO (5) = -2.040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2910	1.0360	.6179	.1428	-.1698	-.2306	-.3020	-.2396	-.1887	.2062	.0344	-.1454	-.2002	-.0867	.0073
30.000			.6440	.1672	-.1529	-.2164	-.2968	-.2554	.0558	.1117	-.1537	-.1695	-.0982	-.0740	-.0151
60.000			.6699	.1920	-.1349	-.1974	-.2796	-.2179	.3142	-.1003	-.3177	-.1571	-.0328	-.0681	-.0604
90.000		1.1100	.5863	.2079	-.1248	-.1888	-.2662	-.2005	.3093		-.4568	-.4317	-.2983	-.1002	-.0679
120.000			.6843	.2097	-.1249	-.1886	-.2660	-.2057	.3743	-.0115	-.0706	-.1052	.0499	.0512	-.0948
135.000								-.2291		.1870		-.1054		.0569	
150.000			.6778	.2043	-.1308	-.1944	-.2822	-.2284	.2086	.3969	.1318	-.0930	-.1021	-.0606	-.1240
165.000				.1895	-.1420	-.2030	-.2830	-.2477	.1680	.3577	.4432	-.0061	-.1535	-.0671	-.0971
180.000	1.2910	1.0790	.6471	.1697	-.1455	-.2126	-.2856	-.2284	.1182	.3000	.4936	-.1688	-.1773	-.0539	-.1018
270.000		1.0050							.6299						

X/LT	.7460	.8530	.9280
PHI			
.000	.0003	.0027	.0176
30.000	-.0213	.0135	.0173
60.000	-.0043	.0706	.0935
90.000	-.0420	.1095	
120.000	-.0875	.0943	.5449
135.000	-.0438	.2166	.3945
150.000	-.0402	.2405	.3796
165.000	-.0025	.2426	.5145
180.000	.0057	.2071	.4226

MACH (1) = 1.246 BETAO (6) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.500	1.3000	1.0420	.6183	.1430	-.1677	-.2306	-.2994	-.2697	-.1841	.2067	.0366	-.1452	-.2047	-.0779	.0142
30.000			.6213	.1443	-.1661	-.2298	-.2979	-.2686	.0531	.1528	-.1198	-.1725	-.1233	-.0727	.0029
60.000			.6265	.1484	-.1661	-.2242	-.3045	-.2431	.3052	-.0893	-.2896	-.1816	-.0275	-.0366	-.0593
90.000		1.0620	.6341	.1594	-.1616	-.2215	-.2931	-.2323	.6133		-.4602	-.4216	-.2649	-.1045	-.0805
120.000			.6405	.1684	-.1568	-.2156	-.2895	-.2333	.3794	.0244	-.0368	-.1252	-.0047	.0280	-.1140
135.000								-.2518		.2329		-.1574		.0154	
150.000			.6492	.1707	-.1512	-.2108	-.2947	-.2456	.1974	.3859	.0805	-.1580	-.1283	-.0859	-.1714
165.000				.1723	-.1497	-.2106	-.2898	-.2559	.1962	.3526	.3960	-.0419	-.1659	-.0689	-.1251
180.000	1.3000	1.0760	.6487	.1723	-.1489	-.2108	-.2893	-.2297	.1202	.3362	.4532	-.1493	-.0808	-.0523	-.1199
270.000		1.0360							.6225						

X/LT	.7460	.8530	.9280

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T28)

MACH (1) = 1.246 BETAO (S) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0050	.0047	.0174
30.000	-.0058	.0101	.0236
60.000	-.0238	.0448	.0828
90.000	-.0078	.0857	
120.000	-.0066	.0878	.3918
135.000	.0024	.1779	.2552
150.000	-.0120	.1727	.2276
165.000	.0137	.1875	.2932
180.000	.0240	.1888	.2580

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T29) (28 SEP 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES
CREF = 38.7090 INCHES YMRP = .0000 INCHES
BREF = 38.7090 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAO = -10.000 ELEVON = .000
RUDDER = .000 SPOBRK = .000

MACH (1) = 1.245 BETAO (1) = .030

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1870	.7886	.3861	-.0417	-.2996	-.3482	-.4019	-.3624	.0016	.0867	-.0174	-.2264	-.1991	-.0446	-.0056
30.000			.4015	-.0293	-.2956	-.3475	-.3928	-.3547	-.0290	-.0429	-.2131	-.2023	-.1543	-.0869	-.0552
60.000			.4584	.0187	-.2660	-.3199	-.3606	-.3055	-.0447	-.4358	-.5428	-.2982	-.2235	-.0548	-.0311
90.000		.9571	.5692	.1157	-.1979	-.2571	-.2891	-.0944	.4905		-.2604	-.3140	-.2178	-.1067	-.0922
120.000			.7119	.2468	-.0977	-.1642	-.2445	-.1657	.5932	.3258	.2965	.1314	.0488	-.0146	-.1784
135.000								-.1662		.4832		.0995		-.0637	
150.000			.8273	.3443	-.0149	-.0853	-.1827	-.1433	.4924	.6084	.2636	-.0708	-.0244	-.1890	-.2260
165.000				.3973	.0276	-.0516	-.1423	-.1045	.3605	.6426	.5469	-.0325	.0046	-.1108	-.1582
180.000	1.1870	1.2790	.8935	.4050	.0307	-.0402	-.1315	-.0656	.2567	.6066	.6235	-.1004	.0554	-.0909	-.1375
270.000		.9507							.4865						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0319	-.0079	-.0319
30.000	-.0619	-.0185	.0266
60.000	-.0464	-.0012	.1245
90.000	-.0464	.0024	
120.000	-.0464	-.0309	.2878
135.000	-.0565	.0537	.1505
150.000	-.0752	.0465	.1946
165.000	-.0542	.0800	.3146
180.000	-.0467	.0941	.2665

ARC11-716 IA14 01+T12+S12N25+AT11 EXTERNAL TANK (RB1T30) (02 OCT 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES
LREF = 38.7090 INCHES YMRP = .0000 INCHES
BREF = 38.7090 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAO = .000 ELEVON = .000
RUDDER = .000 SPOBRK = .000

MACH (1) = .972 BETAO (1) = .040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1580	.8845	.4505	-.0754	-.4297	-.5032	-.5173	-.0121	.1241	-.0253	-.2786	-.3837	.0046	.0118	.0116
30.000			.4543	-.0744	-.4325	-.5073	-.2959	-.0003	.1528	-.0859	-.3125	-.3587	-.0103	-.0051	.0015
60.000			.4552	-.0737	-.4297	-.4978	-.1418	.1678	.2410	-.3826	-.5116	-.2395	-.0529	-.0237	.0000
90.000		.9011	.4602	-.0618	-.4241	-.4874	-.1031	.3701	.5064		-.6965	-.6015	-.1424	-.0671	.0005
120.000			.4646	-.0545	-.4200	-.4925	-.0591	.2292	.3015	-.2185	-.2562	-.1242	-.1134	-.1835	-.0405
135.000								.1490		.0649		-.1941		-.2208	
150.000			.4766	-.0468	-.4146	-.4827	-.1097	.0996	.2358	.2452	-.1310	-.3530	-.2111	-.3182	-.1027
165.000				-.0452	-.4079	-.4864	-.1087	.0772	.2127	.2899	.0919	-.4231	-.1664	-.2489	-.0546
180.000	1.1580	.9159	.4768	-.0477	-.4149	-.4832	-.0732	.0304	.1935	.2915	.1895	-.4820	-.1508	-.2329	-.0600
270.000		.9032							.5112						

X/LT	.7460	.8530	.9280
PHI			
.000	.0437	.0493	-.1628
30.000	.0413	.0565	-.1498
60.000	.0578	.0906	-.0631
90.000	.0989	.1140	
120.000	.1238	.0720	.1689
135.000	.1238	.1183	.1159
150.000	.0922	.1009	.0407
165.000	.1201	.1250	.0769
180.000	.1192	.1262	-.0647

MACH (2) = 1.002 BETAO (1) = .040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1720	.9059	.4774	-.0431	-.3931	-.4645	-.5478	-.0251	.1226	.0248	-.2277	-.3490	-.0527	-.0094	-.0159
30.000			.4804	-.0441	-.3963	-.4686	-.5421	-.0275	.1638	-.0355	-.2728	-.3417	-.0560	-.0274	-.0346
60.000			.4799	-.0431	-.3929	-.4583	-.4500	.0660	.2765	-.3317	-.4798	-.2016	-.0814	-.0672	-.0571
90.000		.9213	.4868	-.0279	-.3874	-.4595	-.2866	.3340	.5342		-.6747	-.6029	-.1964	-.1209	-.0564
120.000			.4911	-.0231	-.3816	-.4572	-.1613	.1472	.3337	-.1710	-.2097	-.0883	-.0982	-.1807	-.1318
135.000								.0694		.0946		-.1593		-.2167	
150.000			.5054	-.0153	-.3807	-.4466	-.2193	.0351	.2698	.2744	-.0910	-.3135	-.1870	-.3258	-.1904

ARC11-716 IA14 01+T12+S12N25+AT11 EXTERNAL TANK (RB1T30)

MACH (2) = 1.002 BETAO (1) = .040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
165.000				-.0128	-.3746	-.4492	-.2541	.0488	.2249	.3097	.1257	-.3672	-.1429	-.2511	-.1371
180.000	1.1720	.9386	.5034	-.0163	-.3773	-.4478	-.1226	-.0082	.2085	.3088	.2184	-.4267	-.1239	-.2365	-.1287
270.000		.9220							.5398						

X/LT	.7460	.8530	.9280
PHI			
.000	.0598	.0792	-.1231
30.000	.0565	.0866	-.1077
60.000	.0685	.1185	-.0302
90.000	.1085	.1434	
120.000	.1220	.1067	.1713
135.000	.1157	.1420	.1313
150.000	.0984	.1243	.0641
165.000	.1068	.1403	.0990
180.000	.1116	.1442	-.0346

MACH (3) = 1.025 BETAO (1) = .040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1860	.9237	.4990	-.0168	-.3662	-.4298	-.5133	-.0521	.1177	.0571	-.1805	-.3077	-.0509	-.0021	-.0412
30.000			.5022	-.0168	-.3676	-.4352	-.5117	-.0372	.1243	.0023	-.2362	-.3133	-.0465	-.0148	-.0527
60.000			.5024	-.0168	-.3628	-.4264	-.5272	.0071	.2916	-.3014	-.4401	-.1745	-.0573	-.0534	-.0762
90.000		.9397	.5107	-.0021	-.3605	-.4255	-.4404	.2539	.5455		-.6286	-.5257	-.1682	-.1117	-.0905
120.000			.5152	.0041	-.3560	-.4226	-.5001	.0941	.3511	-.1387	-.1713	-.0581	-.0668	-.1556	-.1660
135.000								.0324		.1239		-.1324		-.1902	
150.000			.5278	.0102	-.3528	-.4142	-.5237	.0173	.2682	.3016	-.0594	-.2786	-.1571	-.2984	-.2386
165.000				.0098	-.3442	-.4171	-.5054	.0358	.2113	.3351	.1701	-.3276	-.1197	-.2305	-.1766
180.000	1.1860	.9572	.5266	.0084	-.3497	-.4159	-.3001	-.0273	.2003	.3269	.2520	-.3820	-.0957	-.2167	-.1635
270.000		.9435							.5543						

X/LT	.7460	.8530	.9280
PHI			
.000	.0121	.0980	-.0914
30.000	.0029	.1037	-.0767
60.000	.0105	.1316	-.0023
90.000	.0587	.1506	
120.000	.0861	.1133	.1860
135.000	.0753	.1460	.1378
150.000	.0592	.1254	.0726

ARC11-716 IA14 D1+T12+S12N25+AT11 EXTERNAL TANK (RB1T30)

MACH (3) = 1.325 BETAD (1) = .040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
165.000	.0822	.1457	.1140
180.000	.0781	.1464	-.0092

ARC11-716 IA14 01+T12+S12V2%+AT10 EXTERNAL TANK (9B1T31) (06 FEB 74)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES
LREF = 58.7090 INCHES YMRP = .0000 INCHES
BREF = 33.7090 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = .900 ELEVON = .000
RUDDER = .000 SPOBRK = .000

ALPHAO(1) = -10.140 BETAO (1) = -0.370

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9144	.4973	.0851	-.3954	-.6857	-.6403	-.1673	-.0599	-.0662	-.1839	-.3115	-.2060	-.1125	-.0880	-.0521
30.000			.1805	-.3131	-.6201	-.6144	-.3846	-.1862	-.2079	-.3991	-.4770	-.2673	-.1278	-.1093	-.0703
60.000			.3512	-.1395	-.4429	-.3901	-.2928	-.1959	-.3059	-.5284	-.7158	-.4384	-.0893	.0384	-.0037
90.000		.9338	.5635	.0662	-.2395	-.1985	.0440	.1917	.2176		-.6823	-.7636	-.2115	-.0292	-.0065
120.000			.7206	.2204	-.1015	-.0801	.0594	.2675	.3937	.1133	.1263	.0228	-.0738	-.0179	.0562
135.000								.2288		.2717		.0033		-.0456	
150.000			.7560	.2638	-.0766	-.0774	.0410	.2014	.2942	.4127	.2456	-.0057	-.2667	-.1627	-.0460
165.000				.2113	-.1195	-.1265	-.0077	.1445	.2585	.4102	.3555	-.1540	-.3082	-.1791	-.0475
180.000	.9144	1.0570	.6485	.1477	-.1798	-.1860	-.0449	.1094	.2277	.3730	.3089	-.3168	-.3392	-.2473	-.0951
270.000		.5127							.2405						

X/L	.7460	.8530	.9280
PHI			
.000	-.0477	-.0891	-.3116
30.000	-.0796	-.0913	-.2510
60.000	-.0589	-.1081	-.1537
90.000	-.1275	-.3491	
120.000	.1086	-.2559	.5664
135.000	.1171	.0001	.5195
150.000	.0502	.0947	.3112
165.000	.0502	.0960	.4658
180.000	.0138	.0592	.2994

ALPHAO(1) = -10.130 BETAO (2) = -6.560

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9344	.5102	.0910	-.4014	-.6643	-.0416	-.1240	-.0409	-.0539	-.1605	-.3191	-.1956	-.0913	-.0610	-.0399
30.000			.1545	-.3314	-.6239	-.6105	-.2137	-.1489	-.1803	-.3536	-.5061	-.2855	-.1051	-.0829	-.0523
60.000			.3105	-.1897	-.4775	-.4070	-.2580	-.1565	-.2629	-.4866	-.6976	-.4772	-.1169	.0232	.0060
90.000		.8874	.5025	.0205	-.2863	-.2237	.0294	.1849	.2125		-.8571	-.7934	-.2369	-.0503	-.0060
120.000			.6904	.1547	-.1479	-.1220	.0633	.2497	.3750	.1050	.0997	-.0198	-.1147	-.0392	.0442
135.000								.2127		.0555		-.0342		-.0543	
150.000			.7236	.2166	-.1062	-.0894	.0276	.1891	.3511	.0903	.1482	-.0145	-.2797	-.1586	-.0458

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T51)

ALPHAO(1) = -10.130 BETAO (2) = -6.560

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
165.000				.2032	-.1293	-.1318	-.0003	.1499	.2631	.4048	.3208	-.1956	-.2847	-.1701	-.0225
180.000	.9344	1.0620	.6579	.1537	-.1736	-.1783	-.0201	.1215	.2424	.3788	.3070	-.2311	-.3364	-.2075	-.0541
270.000		.5493							.2268						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0365	-.0783	-.3238
30.000	-.0549	-.0735	-.2590
60.000	-.0431	-.0733	-.1349
90.000	-.0788	-.2485	
120.000	.0942	-.2878	.5491
135.000	.0987	-.0198	.2975
150.000	.0394	.0639	.2532
165.000	.0480	.0789	.4446
180.000	.0220	.0499	.2827

ALPHAO(1) = -10.130 BETAO (3) = -4.840

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9572	.5350	.1132	-.3830	-.6653	-.5082	-.1036	-.0256	-.0350	-.1526	-.2990	-.2171	-.0791	-.0353	-.0284
30.000			.1644	-.3308	-.6288	-.6249	-.1790	-.1088	-.1392	-.3130	-.4500	-.2949	-.0923	-.0584	-.0369
60.000			.2868	-.2141	-.5129	-.4083	-.2383	-.1246	-.2512	-.4591	-.6776	-.4879	-.1337	.0079	.0225
90.000		.8935	.4618	-.0405	-.3377	-.2623	.0195	.1848	.2140		-.6384	-.8052	-.2631	-.0620	.0037
120.000			.6221	.1216	-.1967	-.1612	.0428	.2401	.3763	.1069	.0636	-.0553	-.1581	-.0602	.0387
135.000								.2040		.2514		-.0646		-.0848	
150.000			.7024	.1986	-.1338	-.1246	.0197	.1844	.2918	.3812	.0711	-.0508	-.3108	-.1646	-.0470
165.000				.1943	-.1343	-.1339	.0024	.1566	.2718	.4121	.3025	-.2304	-.2867	-.1761	-.0210
180.000	.9572	1.0740	.6718	.1602	-.1664	-.1672	-.0229	.1349	.2582	.3920	.3130	-.2475	-.2864	-.2087	-.0418
270.000		.6008							.2228						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0255	-.0684	-.3260
30.000	-.0415	-.0639	-.2658
60.000	-.0265	-.0543	-.1347
90.000	-.0393	-.1729	
120.000	.0879	-.2889	.5105
135.000	.0889	-.0251	.2722
150.000	.0262	.0436	.2262

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(1) = -10.130 BETAO (3) = -4.840

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
165.000	.0521	.0689	.3915
180.000	.0318	.0462	.2561

ALPHAO(1) = -10.080 BETAO (4) = -3.250

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9743	.5500	.1240	-.3677	-.6678	-.4624	-.0955	-.0163	-.0245	-.1504	-.2853	-.2271	-.0727	-.0239	-.0128
30.000			.1605	-.3394	-.6343	-.6325	-.1594	-.0813	-.1062	-.2798	-.4209	-.2814	-.0999	-.0478	-.0260
60.000			.2624	-.2398	-.5421	-.4025	-.1886	-.1015	-.2233	-.4493	-.6573	-.4845	-.1444	-.0040	.0237
90.000		.8149	.4179	-.0830	-.3884	-.2972	.0150	.1850	.2153		-.6220	-.8146	-.2764	-.0590	.0056
120.000			.5788	.0729	-.2451	-.1944	.0204	.2245	.3714	.1032	.0320	-.0971	-.1890	-.0734	.0269
135.000								.1890		.2369		-.0949		-.1030	
150.000			.6767	.1672	-.1693	-.1519	.0038	.1728	.2884	.3650	.0218	-.1245	-.3381	-.1820	-.0498
165.000				.1837	-.1549	-.1519	-.0024	.1547	.2744	.4073	.2762	-.2689	-.3033	-.1817	-.0091
180.000	.9743	1.0790	.6787	.1658	-.1676	-.1691	-.0176	.1408	.2632	.3957	.3153	-.2662	-.2963	-.1919	-.0439
270.000		.6475							.2167						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0262	-.0653	-.3270
30.000	-.0290	-.0596	-.2781
60.000	-.0193	-.0511	-.1475
90.000	-.0195	-.1209	
120.000	.0759	-.2888	.4506
135.000	.0751	-.0414	.2153
150.000	.0179	.0149	.1615
165.000	.0513	.0513	.3726
180.000	.0381	.0344	.2671

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1731)

ALPHAO(1) = -10.040 BETAO (5) = -1.600

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	.9934	.5676	.1324	-.3403	-.6515	-.4221	-.0951	-.0074	-.0177	-.1441	-.3132	-.2688	-.0726	-.0180	.0020
30.000			.1565	-.3523	-.6308	-.5735	-.1290	-.0489	-.0772	-.2572	-.4423	-.3077	-.1037	-.0397	-.0156
60.000			.2373	-.2695	-.5702	-.3839	-.1569	-.0708	-.1921	-.4453	-.6493	-.5085	-.1613	-.0173	.0241
90.000		.7858	.3786	-.1302	-.4418	-.3177	.0132	.1907	.2250		-.6308	-.6347	-.2964	-.0554	.0097
120.000			.5362	.0291	-.2962	-.2229	.0075	.2173	.3756	.1022	.0055	-.1372	-.2161	-.0839	.0244
135.000								.1808		.2282		-.1462		-.1243	
150.000			.6450	.1347	-.2066	-.1813	-.0101	.1647	.2842	.3552	-.0155	-.2521	-.3633	-.2038	-.0586
165.000				.1694	-.1726	-.1660	-.0178	.1570	.2733	.4061	.2566	-.3359	-.3285	-.1866	-.0106
180.000	.9934	1.0830	.6841	.1672	-.1718	-.1673	-.0049	.1542	.2681	.3989	.3207	-.2834	-.3054	-.1844	-.0180
270.000		.6983							.2154						

X/LT	.7480	.8530	.9280
PHI			
.000	-.3190	-.0645	-.3307
30.000	-.0234	-.0535	-.2829
60.000	-.0103	-.0428	-.1568
90.000	.0018	-.0838	
120.000	.0667	-.2480	.3490
135.000	.0608	-.0473	.1417
150.000	.0058	-.0133	.0984
165.000	.0474	.0320	.3486
180.000	.0300	.0211	.2556

ALPHAO(1) = -10.040 BETAO (6) = .100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	.9933	.5667	.1280	-.3481	-.6479	-.3630	-.0900	-.0059	-.0161	-.1427	-.2804	-.2337	-.0598	-.0072	.0097
30.000			.1443	-.3523	-.6388	-.4029	-.1090	-.0268	-.0567	-.2171	-.4217	-.3051	-.0966	-.0320	-.0077
60.000			.2074	-.2985	-.5871	-.3102	-.1229	-.0449	-.1595	-.4182	-.6321	-.4889	-.1565	-.0233	.0303
90.000		.7403	.3312	-.1738	-.4651	-.3657	.0246	.1951	.2261		-.6190	-.6068	-.2738	-.0437	.0211
120.000			.4845	-.0166	-.3333	-.2506	-.0084	.2045	.3724	.1053	-.0255	-.1660	-.2257	-.0784	.0189
135.000								.1690		.2173		-.1778		-.1301	
150.000			.6115	.1010	-.2346	-.2022	-.0278	.1503	.2778	.3372	-.0723	-.3361	-.3787	-.1987	-.0997
165.000				.1604	-.1776	-.1719	-.0091	.1476	.2703	.3945	.2418	-.3777	-.3334	-.1925	-.0218
180.000	.9933	1.0820	.6828	.1738	-.1608	-.1520	.0095	.1551	.2698	.3935	.3194	-.3008	-.2900	-.1752	-.0097
270.000		.7378							.2114						

X/LT	.7480	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1731)

ALPHA0(1) = -10.040 BETA0 (6) = .100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	-.0087	-.0828	-.3303
30.000	-.0186	-.0548	-.2935
60.000	-.0022	-.0343	-.1664
90.000	.0146	-.0565	
120.000	.0573	-.1609	.2757
135.000	.0484	-.0468	.0914
150.000	-.0066	-.0322	.0464
165.000	.0314	.0098	.1575
180.000	.0406	.0210	.0832

ALPHA0(1) = -10.040 BETA0 (7) = 1.810

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9931	.5671	.1304	-.3515	-.6559	-.4665	-.0987	-.0073	-.0176	-.1467	-.3122	-.2464	-.0710	-.0208	.0030
30.000			.1366	-.3565	-.6623	-.3871	-.0936	-.0058	-.0345	-.1941	-.4218	-.3192	-.1055	-.0390	-.0094
60.000			.1818	-.3245	-.6190	-.2955	-.0956	-.0187	-.1277	-.4016	-.6306	-.4971	-.1665	-.0375	.0223
90.000		.9003	.2881	-.2192	-.5197	-.3711	.0242	.1952	.2344		-.6198	-.7609	-.2660	-.0366	.0260
120.000			.4360	-.0710	-.3852	-.3053	-.0242	.1942	.3708	.1071	-.0480	-.2051	-.2565	-.1078	.0032
135.000								.1476		.2363		-.2351		-.1093	
150.000			.5716	.0612	-.2767	-.2483	-.0543	.1307	.2647	.3144	-.1396	-.4338	-.4040	-.2072	-.0671
165.000				.1404	-.2030	-.1938	-.0262	.1332	.2592	.3812	.2245	-.3747	-.2950	-.1748	-.0263
180.000	.9931	1.0840	.6867	.1662	-.1772	-.1700	.0081	.1496	.2652	.3836	.3172	-.3275	-.2830	-.1970	-.0315
270.000		.7892							.2090						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0181	-.0697	-.3290
30.000	-.0161	-.0562	-.3072
60.000	-.0013	-.0367	-.1866
90.000	.0232	-.0437	
120.000	.0452	-.1104	.2495
135.000	.0336	-.0704	.0167
150.000	-.0091	-.0447	-.0600
165.000	.0265	-.0002	.1370
180.000	.0245	.0072	.0968

ARC11-T16 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHA0(1) = -10.130 BETA0 (8) = 3.580

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9778	.5554	.1225	-.3675	-.8638	-.4442	-.0994	-.0151	-.0255	-.1521	-.2950	-.2349	-.0703	-.0221	-.0102
30.000			.1193	-.3655	-.6588	-.2554	-.0770	.0109	-.0156	-.1754	-.3807	-.3292	-.0824	-.0218	-.0032
60.000			.1329	-.3520	-.6259	-.2187	-.0631	.0087	-.0985	-.3707	-.5919	-.4987	-.1375	-.0240	.0215
90.000		.8908	.2339	-.2598	-.5718	-.2335	.0253	.2016	.2392		-.5886	-.8281	-.2707	-.0398	.0258
120.000			.3827	-.1153	-.4374	-.3184	-.0360	.1811	.3718	.1170	-.0641	-.2489	-.2397	-.1196	-.0079
135.000								.1294		.1972		-.2957		-.1781	
150.000			.5295	.0262	-.3148	-.2778	-.0725	.1123	.2529	.2940	-.1936	-.4792	-.4052	-.2086	-.0662
165.000				.1161	-.2130	-.2057	-.0405	.1185	.2489	.3601	.2042	-.3539	-.2650	-.1949	-.0477
180.000	.9778	1.0770	.6790	.1637	-.1631	-.1592	.0017	.1468	.2531	.3760	.3120	-.3322	-.2945	-.2360	-.0502
270.000		.8295							.2081						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0213	-.0606	-.3264
30.000	-.0144	-.0616	-.3189
60.000	-.0029	-.0418	-.2019
90.000	.0194	-.0448	
120.000	.0281	-.1041	.1953
135.000	.0154	-.0423	.0014
150.000	-.0453	-.0901	-.0654
165.000	.0137	-.0011	.1199
180.000	.0170	.0173	.0763

ALPHA0(1) = -10.130 BETA0 (9) = 5.290

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9902	.5346	.1086	-.3894	-.6807	-.4868	-.1185	-.0323	-.0407	-.1629	-.3107	-.2228	-.0916	-.0478	-.0311
30.000			.1002	-.3892	-.6668	-.2524	-.0752	.0199	-.0062	-.1521	-.3681	-.2995	-.0917	-.0275	-.0105
60.000			.1225	-.3852	-.6422	-.2034	-.0587	.0199	-.0763	-.3503	-.5899	-.4974	-.1554	-.0186	.0136
90.000		.8018	.1899	-.3047	-.6021	-.2034	.0161	.1987	.2438		-.5842	-.8733	-.2832	-.0513	.0133
120.000			.3290	-.1649	-.4891	-.4010	-.0485	.1684	.3653	.1187	-.0856	-.2709	-.2474	-.1300	-.0490
135.000								.1066		.1801		-.3356		-.1824	
150.000			.4662	-.0188	-.3905	-.3417	-.0993	.0852	.2327	.2619	-.2559	-.5355	-.4036	-.2343	-.0921
165.000				.0927	-.2405	-.2408	-.0655	.0949	.2290	.3340	.1858	-.3602	-.2782	-.2248	-.0869
180.000	.9902	1.0410	.6884	.1563	-.1767	-.1771	-.0182	.1222	.2443	.3805	.3018	-.3022	-.3519	-.2518	-.0844
270.000		.8634							.2029						

X/LT	.7480	.8530	.9280
PHI			

ARC11-716 IA14 OL+T12+S12N2S+AT1D EXTERNAL TANK (RB1T31)

ALPHA0(1) = -10.130 BETA0 (9) = 5.290

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	-.0297	-.0887	-.3234
30.000	-.0270	-.0677	-.3277
60.000	-.0134	-.0494	-.2135
90.000	.0020	-.0537	
120.000	-.0020	-.0897	.1536
135.000	-.0099	-.0466	-.0099
150.000	-.0800	-.1080	-.0886
165.000	-.0099	-.0163	.1184
180.000	-.0146	-.0016	.0827

ALPHA0(1) = -10.120 BETA0 (10) = 7.010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1150	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9390	.9098	.0949	-.3981	-.6660	-.5323	-.1385	-.0487	-.0557	-.1714	-.3283	-.2208	-.1093	-.0659	-.0423
30.000			.0791	-.4081	-.6784	-.2352	-.0655	.0257	-.0032	-.1348	-.3538	-.2925	-.0800	-.0337	-.0176
60.000			.0883	-.4068	-.6562	-.1804	-.0397	.0346	-.0497	-.3232	-.5731	-.4991	-.1534	-.0114	.0080
90.000		.5555	.1459	-.3451	-.6271	-.1900	.0204	.1996	.2438		-.5718	-.8776	-.2699	-.0555	-.0007
120.000			.2772	-.2111	-.5296	-.4305	-.0572	.1581	.3591	.1223	-.1050	-.2875	-.2424	-.1584	-.0775
135.000								.0858		.1649		-.3594		-.2221	
150.000			.4408	-.0582	-.3871	-.3755	-.1247	.0592	.2143	.2331	-.3072	-.5775	-.3913	-.2543	-.1397
165.000				.0677	-.2647	-.2655	-.0903	.0682	.2073	.3033	.1557	-.3549	-.3053	-.2548	-.1177
180.000	.9390	1.0270	.6584	.1478	-.1900	-.1876	-.0265	.1057	.2289	.3375	.2474	-.3123	-.3865	-.2738	-.1274
270.000		.9018							.2014						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0363	-.0804	-.3239
30.000	-.0363	-.0781	-.3354
60.000	-.0216	-.0563	-.2230
90.000	-.0148	-.0758	
120.000	-.0238	-.1001	.1489
135.000	-.0263	-.0611	-.0330
150.000	-.0964	-.1249	-.1184
165.000	-.0401	-.0355	.0710
180.000	-.0996	-.0310	.0563

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(1) = -10.130 BETAO (11) = 8.780

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9069	.4750	.0765	-.4045	-.6778	-.5784	-.1603	-.0638	-.0712	-.1775	-.3349	-.2011	-.1138	-.0891	-.0487
30.000			.0492	-.4258	-.6837	-.2088	-.8570	.0300	.0055	-.1237	-.3538	-.2657	-.0936	-.0392	-.0323
60.000			.0558	-.4253	-.6338	-.1532	-.0254	.0460	-.0214	-.3013	-.5658	-.4694	-.1243	-.0118	.0015
90.000		.4971	.0996	-.3812	-.6531	- 1723	.0240	.2016	.2471		-.5668	-.8546	-.2427	-.0474	-.0116
120.000			.2224	-.2655	-.5593	-.4321	-.0635	.1438	.3546	.1200	-.1145	-.3120	-.2577	-.1747	-.1122
135.000								.0628		.1481		-.3868		-.2444	
150.000			.3955	-.0970	-.4164	-.4046	-.1514	.0329	.1915	.1821	-.3454	-.6292	-.3963	-.2801	-.1747
165.000				.0475	-.2813	-.2788	-.1227	.0391	.1833	.2592	.1432	-.3564	-.3437	-.2816	-.1499
180.000	.9069	.9593	.6455	.1429	-.1870	-.1882	-.0420	.0939	.2025	.3211	.2730	-.5113	-.4200	-.3079	-.1720
270.000		.9335							.2030						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0464	-.0884	-.3186
30.000	-.0440	-.0851	-.3393
60.000	-.0227	-.0644	-.2182
90.000	-.0318	-.0971	
120.000	-.0474	-.1377	.1388
135.000	-.0440	-.0734	-.0537
150.000	-.1093	-.1447	-.1646
165.000	-.0652	-.0577	.0378
180.000	-.0983	-.0664	.0514

ALPHAO(2) = -8.110 BETAO (1) = -8.350

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9593	.5555	.1440	-.3567	-.6473	-.6723	-.1469	-.0531	-.0673	-.1911	-.2883	-.1798	-.1055	-.0844	-.0512
30.000			.2439	-.2539	-.5696	-.5640	-.2855	-.1491	-.1795	-.4157	-.4304	-.2239	-.1242	-.0991	-.0711
60.000			.4054	-.0982	-.3977	-.3522	-.2228	-.1070	-.2042	-.5453	-.6863	-.3492	-.0801	.0486	.0057
90.000		.9713	.5867	.0811	-.2204	-.1572	.0488	.2229	.2838		-.6582	-.6703	-.1168	-.0039	.0097
120.000			.7008	.1971	-.1215	-.0953	.0659	.2531	.3516	.0259	.1036	.0175	-.0545	-.0180	.0475
135.000								.2061		.2279		-.0027		-.0487	
150.000			.7160	.2107	-.1229	-.1166	.0122	.1730	.2558	.3818	.2419	-.0205	-.2488	-.1633	-.0467
165.000				.1563	-.1773	-.1785	-.0355	.1206	.2269	.3843	.3413	-.1656	-.3016	-.1787	-.0407
180.000	.9593	1.0190	.5960	.0908	-.2358	-.2363	-.0631	.0894	.2064	.3534	.2952	-.3300	-.3417	-.2415	-.0865
270.000		.5547							.3174						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (R81T31)

ALPHAO(2) = -8.110 BETAO (1) = -8.350

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0465	-.0891	-.3143
30.000	-.0676	-.0739	-.2577
60.000	-.0261	-.0467	-.1265
90.000	-.0490	-.2154	
120.000	.1122	-.1748	.5903
135.000	.1220	.0459	.3380
150.000	.0603	.1197	.3445
165.000	.0657	.1229	.4734
180.000	.0293	.0811	.3004

ALPHAO(2) = -8.120 BETAO (2) = -6.640

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9885	.5806	.1550	-.3468	-.6410	-.6755	-.1198	-.0362	-.0510	-.1833	-.2723	-.1767	-.0879	-.0626	-.0484
30.000			.2343	-.2667	-.5895	-.5699	-.2070	-.1145	-.1424	-.3705	-.3937	-.2260	-.1098	-.0783	-.0526
60.000			.3726	-.1335	-.4381	-.3555	-.2073	-.0839	-.1822	-.5181	-.6891	-.3728	-.0971	.0354	.0195
90.000		.9339	.5377	.0306	-.2791	-.1880	.0335	.2196	.2837		-.6531	-.6950	-.1338	-.0055	.0198
120.000			.6572	.1467	-.1777	-.1348	.0655	.2406	.3489	.0160	.0742	-.0248	-.1023	-.0448	.0377
135.000								.1987		.2145		-.0477		-.0795	
150.000			.6906	.1755	-.1578	-.1372	.0018	.1722	.2585	.3668	.1409	-.0317	-.2788	-.1677	-.0380
165.000				.1427	-.1873	-.1814	-.0302	.1283	.2360	.3843	.3143	-.2072	-.2888	-.1724	-.0210
180.000	.9885	1.0350	.6123	.0980	-.2300	-.2224	-.0486	.1030	.2214	.3635	.2988	-.2320	-.3353	-.2187	-.0555
270.000		.6021							.3080						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0323	-.0751	-.3169
30.000	-.0420	-.0631	-.2592
60.000	-.0140	-.0282	-.1222
90.000	-.0081	-.1208	
120.000	.1022	-.1883	.5686
135.000	.1055	.0333	.3254
150.000	.0595	.1048	.2967
165.000	.0626	.1133	.4377
180.000	.0333	.0791	.2880

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(2) = -8.120 BETAO (3) = -4.940

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0060	.5992	.1703	-.3328	-.6404	-.6436	-.0939	-.0207	-.0360	-.1741	-.2672	-.1686	-.0712	-.0412	-.0328
30.000			.2282	-.2790	-.5940	-.5977	-.1732	-.0822	-.1123	-.3286	-.3423	-.2155	-.1044	-.0607	-.0415
60.000			.3434	-.1649	-.4833	-.3633	-.1731	-.0616	-.1620	-.4866	-.6754	-.3730	-.1204	.0146	.0268
90.000		.8971	.4943	-.0178	-.3273	-.2176	.0269	.2201	.2860		-.6521	-.7035	-.1565	-.0069	.0268
120.000			.5150	.1048	-.2171	-.1724	.0737	.2335	.3529	.0094	.0408	-.0640	-.1384	-.0681	.0314
135.000								.1909		.2066		-.0760		-.0900	
150.000			.5689	.1496	-.1830	-.1611	-.0039	.1676	.2614	.3553	.0603	-.0540	-.3106	-.1783	-.0492
165.000				.1374	-.2019	-.1928	-.0261	.1329	.2431	.3861	.2923	-.2405	-.2916	-.1927	-.0148
180.000	1.0060	1.0440	.6246	.1034	-.2279	-.2210	-.0335	.1136	.2335	.3711	.3029	-.2480	-.2979	-.2193	-.0457
270.000		.6484							.3004						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0279	-.0630	-.3187
30.000	-.0303	-.0513	-.2628
60.000	-.0061	-.0157	-.1273
90.000	.0154	-.0605	
120.000	.0920	-.2032	.5411
135.000	.0954	.0178	.3007
150.000	.0428	.0872	.2627
165.000	.0656	.1011	.4070
180.000	.0446	.0726	.2627

ALPHAO(2) = -8.130 BETAO (4) = -3.270

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0220	.5123	.1788	-.3301	-.6290	-.6147	-.0872	-.0080	-.0241	-.1604	-.2583	-.1720	-.0619	-.0199	-.0113
30.000			.2199	-.2888	-.5947	-.5799	-.1424	-.0523	-.0846	-.2869	-.3652	-.2000	-.0987	-.0484	-.0209
60.000			.3178	-.1928	-.5106	-.3491	-.1416	-.0354	-.1313	-.4535	-.6607	-.3998	-.1192	-.0038	.0358
90.000		.8607	.4468	-.0600	-.3773	-.2297	.0272	.2231	.2909		-.6312	-.6999	-.1776	-.0110	.0284
120.000			.5736	.0591	-.2619	-.1941	.0578	.2240	.3542	.0157	.0159	-.0981	-.1671	-.0739	.0245
135.000								.1844		.2015		-.0976		-.107?	
150.000			.6408	.1283	-.2116	-.1833	-.0132	.1621	.2615	.3427	.0070	-.1151	-.3221	-.19:	-.0493
165.000				.1274	-.1994	-.1892	-.0231	.1379	.2494	.3854	.2696	-.2717	-.2936	-.1854	-.0093
180.000	1.0220	1.0470	.6324	.1104	-.2212	-.2037	-.0250	.1312	.2410	.3777	.3006	-.2787	-.2903	-.1892	-.0384
270.000		.6917							.2940						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(2) = -8.130 BETAO (4) = -3.270

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8300	.9280
PHI			
.000	-.0192	-.0554	-.3205
30.000	-.0199	-.0427	-.2667
60.000	.0065	-.0082	-.1370
90.000	.0319	-.0275	
120.000	.0861	-.2002	.4903
135.000	.0966	.0044	.2531
150.000	.0314	.0582	.2132
165.000	.0656	.0838	.3790
180.000	.0498	.0635	.2739

ALPHAO(2) = -8.130 BETAO (5) = -1.600

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0340	.6243	.1871	-.3309	-.6190	-.5227	-.0909	-.0048	-.0205	-.1595	-.2639	-.1623	-.0511	-.0128	.0010
30.000			.2128	-.3040	-.6026	-.5623	-.1201	-.0311	-.0612	-.2597	-.3861	-.2016	-.0883	-.0423	-.0175
60.000			.2885	-.2243	-.5431	-.3166	-.1140	-.0162	-.1077	-.4233	-.6449	-.4046	-.1131	-.0173	.0285
90.000		.8213	.4041	-.1134	-.4284	-.2304	.0239	.2244	.2921		-.6234	-.7066	-.1926	-.0180	.0312
120.000			.5255	.0143	-.3088	-.2191	.0110	.2150	.3509	.0264	-.0136	-.1373	-.1978	-.0874	.0198
135.000								.1711		.1925		-.1451		-.1230	
150.000			.6102	.0947	-.2390	-.2071	-.0229	.1520	.2615	.3312	-.0267	-.2286	-.3488	-.2054	-.0578
165.000				.1160	-.2203	-.2019	-.0284	.1351	.2472	.3809	.2449	-.3343	-.3168	-.1868	-.0121
180.000	1.0340	1.0450	.6329	.1084	-.2169	-.2014	-.0170	.1346	.2430	.3750	.3095	-.3046	-.2918	-.1803	-.0212
270.000		.7396							.2882						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0136	-.0538	-.3240
30.000	-.0156	-.0408	-.2798
60.000	.0099	-.0108	-.1487
90.000	.0337	-.0172	
120.000	.0706	-.1899	.3933
135.000	.0693	-.0075	.1704
150.000	.0118	.0279	.1188
165.000	.0528	.0582	.3521
180.000	.0366	.0451	.2583

ARC11-716 IA14 OL+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(2) = -8.130 BETAO (6) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0350	.6192	.1765	-.3356	-.6204	-.5900	-.0922	-.0080	-.0181	-.1598	-.3105	-.1731	-.0568	-.0127	-.0008
30.000			.1931	-.3212	-.6185	-.5018	-.1023	-.0165	-.0384	-.2297	-.4072	-.2187	-.0847	-.0444	-.0202
60.000			.2486	-.2629	-.5727	-.2997	-.0946	-.0013	-.0889	-.4092	-.6388	-.4272	-.1119	-.0308	.0118
90.000		.7795	.3549	-.1587	-.4821	-.2290	.0228	.2186	.2928		-.6160	-.7051	-.2204	-.0252	.0223
120.000			.4777	-.0365	-.3684	-.2575	-.0023	.2040	.3505	.0224	-.0409	-.1754	-.2217	-.0995	.0091
135.000								.1584		.1804		-.1916		-.1395	
150.000			.5781	.0580	-.2850	-.2305	-.0411	.1376	.2538	.3103	-.0702	-.3442	-.3797	-.2192	-.0693
165.000				.0990	-.2416	-.2091	-.0358	.1257	.2419	.3720	.2223	-.3851	-.3310	-.2019	-.0280
180.000	1.0350	1.0470	.6344	.1089	-.2335	-.2052	-.0214	.1292	.2419	.3673	.3047	-.3107	-.2747	-.1912	-.0169
270.000		.7768							.2803						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0124	-.0593	-.3303
30.000	-.0154	-.0481	-.2958
60.000	.0101	-.0154	-.1590
90.000	.0299	-.0199	
120.000	.0557	-.1516	.3090
135.000	.0505	-.0279	.1119
150.000	-.0044	-.0144	.0605
165.000	.0317	.0262	.1581
180.000	.0431	.0389	.0811

ALPHAO(2) = -8.120 BETAO (7) = 1.700

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0290	.6223	.1772	-.3312	-.6219	-.6165	-.0921	-.0083	-.0217	-.1583	-.2516	-.1636	-.0541	-.0146	-.0027
30.000			.1821	-.3302	-.6251	-.4219	-.0887	.0033	-.0205	-.2126	-.3586	-.2110	-.0673	-.0336	-.0190
60.000			.2229	-.2931	-.5814	-.2568	-.0649	.0244	-.0614	-.3798	-.6195	-.4263	-.0941	-.0222	.0040
90.000		.7390	.3097	-.2031	-.5221	-.2226	.0370	.2325	.2999		-.5990	-.7375	-.2248	-.0324	.0201
120.000			.4283	-.0826	-.4180	-.2683	-.0064	.1990	.3502	.0332	-.0666	-.2033	-.2183	-.1003	.0003
135.000								.1480		.1722		-.2375		-.1593	
150.000			.5410	.0222	-.3148	-.2580	-.0527	.1292	.2496	.2939	-.1471	-.4330	-.3900	-.2049	-.0670
165.000				.0857	-.2555	-.2214	-.0406	.1193	.2399	.3589	.2056	-.3763	-.2868	-.1740	-.0277
180.000	1.0290	1.0420	.6322	.1097	-.2300	-.2061	-.0180	.1306	.2399	.3584	.3018	-.3485	-.2710	-.2074	-.0302
270.000		.8181							.2771						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(2) = -8.120 BETAO (7) = 1.700

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0131	-.0548	-.3245
30.000	-.0158	-.0481	-.3068
60.000	.0023	-.0200	-.1774
90.000	.0268	-.0214	
120.000	.0468	-.0995	.2654
135.000	.0384	-.0468	.0297
150.000	.0036	-.0219	-.0483
165.000	.0351	.0180	.1384
180.000	.0339	.0307	.0954

ALPHAO(2) = -8.110 BETAO (8) = 3.340

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0230	.6102	.1685	-.3365	-.6357	-.5966	-.1048	-.0190	-.0297	-.1660	-.2791	-.1694	-.0604	-.0245	-.0203
30.000			.1685	-.3385	-.6274	-.3377	-.0809	.0123	-.0064	-.1953	-.3721	-.2268	-.0541	-.0314	-.0183
60.000			.1945	-.3206	-.6082	-.2612	-.0449	.0431	-.0346	-.3649	-.6011	-.4296	-.0927	-.0230	.0032
90.000		.6928	.2607	-.2436	-.5587	-.2137	.0428	.2378	.3044		-.5989	-.7034	-.2126	-.0357	.0139
120.000			.3819	-.1315	-.4649	-.2757	-.0195	.1907	.3475	.0423	-.0886	-.2370	-.2341	-.1154	-.0116
135.000								.1324		.1646		-.2964		-.1728	
150.000			.4994	-.0124	-.3542	-.2934	-.0698	.1078	.2383	.2757	-.2044	-.5123	-.4085	-.2122	-.0742
165.000				.0665	-.2678	-.2459	-.0583	.1001	.2262	.3431	.1833	-.3663	-.2706	-.1865	-.0531
180.000	1.0230	1.0420	.6236	.1016	-.2255	-.2088	-.0275	.1172	.2272	.3510	.2963	-.3457	-.2924	-.2426	-.0531
270.000		.8584							.2745						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0235	-.0577	-.3266
30.000	-.0168	-.0532	-.3206
60.000	-.0032	-.0307	-.2021
90.000	.0193	-.0322	
120.000	.0260	-.0919	.2094
135.000	.0173	-.0305	.0034
150.000	-.0300	-.0824	-.0756
165.000	.0168	.0128	.1000
180.000	.0233	.0302	.0672

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(2) = -8.090 BETAO (9) = 4.950

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0050	.5962	.1647	-.3369	-.6269	-.6468	-.1118	-.0239	-.0390	-.1712	-.2752	-.1611	-.0712	-.0350	-.0321
30.000			.1514	-.3423	-.6397	-.3115	-.0729	.0255	.0082	-.1724	-.3563	-.2099	-.0352	-.0247	-.0183
60.000			.1642	-.3418	-.6245	-.1951	-.0214	.0654	-.0111	-.3349	-.5950	-.4212	-.0767	-.0138	-.0027
90.000		.6482	.2219	-.2783	-.5793	-.1768	.0477	.2301	.3177		-.5987	-.7548	-.1845	-.0340	.0029
120.000			.3315	-.1662	-.4893	-.2917	-.0217	.1797	.3478	.0539	-.1067	-.2550	-.2319	-.1144	-.0395
135.000								.1178		.1548		-.3250		-.1779	
150.000			.4576	-.0503	-.3812	-.3536	-.0878	.0916	.2294	.2518	-.2518	-.5214	-.4013	-.2285	-.0909
165.000				.0476	-.2944	-.2749	-.0739	.0859	.2159	.3205	.1706	-.3659	-.2740	-.2142	-.0852
180.000	1.0050	1.0260	.6168	.1007	-.2404	-.2179	-.0340	.1034	.2216	.3397	.2888	-.3079	-.3345	-.2496	-.0770
270.000		.9002							.2745						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0244	-.0592	-.3189
30.000	-.0276	-.0559	-.3241
60.000	-.0089	-.0318	-.2094
90.000	.0098	-.0306	
120.000	.0079	-.0746	.1699
135.000	.0012	-.0358	-.0059
150.000	-.0652	-.0895	-.0908
165.000	.0075	-.0004	.1145
180.000	-.0034	.0161	.0958

ALPHAO(2) = -8.080 BETAO (10) = 6.750

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9817	.5728	.1525	-.3570	-.6372	-.6642	-.1262	-.0400	-.0566	-.1772	-.2929	-.1633	-.0790	-.0567	-.0425
30.000			.1271	-.3470	-.6563	-.2789	-.0575	.0349	.0105	-.1537	-.3432	-.2189	-.0552	-.0249	-.0244
60.000			.1289	-.3637	-.6426	-.1718	-.0094	.0782	.0053	-.3116	-.5804	-.4123	-.0724	-.0086	-.0010
90.000		.5987	.1736	-.3274	-.6085	-.1644	.0428	.2280	.3201		-.5919	-.6728	-.1837	-.0373	-.0049
120.000			.2808	-.2147	-.5303	-.2904	-.0314	.1712	.3455	.0574	-.1303	-.2771	-.2279	-.1472	-.0748
135.000								.1005		.1458		-.3494		-.2130	
150.000			.4150	-.0926	-.4080	-.3767	-.1072	.0681	.2129	.2254	-.3113	-.5677	-.3702	-.2525	-.1374
165.000				.0177	-.3081	-.2914	-.0926	.0614	.1924	.2860	.1434	-.3572	-.2895	-.2493	-.1170
180.000	.9817	.9728	.6031	.0849	-.2414	-.2360	-.0475	.0879	.2020	.3171	.2771	-.3215	-.3649	-.2622	-.1180
270.000		.9368							.2708						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(2) = -8.080 BETAO (10) = 6.750

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0303	-.0732	-.3227
30.000	-.0310	-.0675	-.3312
60.000	-.0118	-.0361	-.2140
90.000	-.0044	-.0445	
120.000	-.0115	-.0814	.1620
135.000	-.0147	-.0361	-.0226
150.000	-.0862	-.1036	-.1247
165.000	-.0279	-.0169	.0842
180.000	-.0435	-.0100	.0832

ALPHAO(2) = -8.090 BETAO (11) = 8.570

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	.9504	.5363	.1272	-.3702	-.6558	-.6752	-.1555	-.0644	-.0776	-.1941	-.2991	-.1721	-.1031	-.0856	-.0535
30.000			.0877	-.4030	-.6824	-.2506	-.0501	.0380	.0127	-.1483	-.3423	-.2129	-.0671	-.0467	-.0503
60.000			.0857	-.4025	-.6666	-.1565	-.0086	.0754	.0194	-.2996	-.5961	-.3969	-.0766	-.0237	-.0158
90.000		.5437	.1255	-.3712	-.6411	-.1560	.0400	.2217	.3218		-.5943	-.5552	-.1811	-.0433	-.0237
120.000			.2285	-.2677	-.5745	-.3182	-.0388	.1610	.3357	.0520	-.1506	-.3282	-.2389	-.1746	-.1050
135.000								.0806		.1289		-.3932		-.2392	
150.000			.3693	-.1331	-.4558	-.4406	-.1330	.0427	.1910	.1806	-.3366	-.6332	-.3944	-.2842	-.1666
165.000				-.0084	-.3361	-.3312	-.1283	.0296	.1682	.2489	.1207	-.3757	-.3472	-.2844	-.1507
180.000	.9504	.9271	.5897	.0768	-.2600	-.2509	-.0701	.0630	.1769	.2958	.2558	-.4995	-.4277	-.3013	-.1711
270.000		.9733							.2679						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0542	-.0928	-.3239
30.000	-.0485	-.0798	-.3354
60.000	-.0267	-.0521	-.2184
90.000	-.0260	-.0756	
120.000	-.0388	-.1171	.1493
135.000	-.0383	-.0533	-.0426
150.000	-.1056	-.1273	-.1566
165.000	-.0576	-.0398	.0566
180.000	-.0896	-.0476	.0742

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(3) = -6.100 BETAO (1) = -8.140

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9972	.6157	.1952	-.3081	-.6190	-.6558	-.1371	-.0514	-.0648	-.1865	-.2763	-.1654	-.0942	-.0685	-.0597
30.000			.3021	-.2026	-.5315	-.5330	-.2399	-.1139	-.1494	-.4300	-.3999	-.1869	-.1180	-.0882	-.0617
60.000			.4500	-.0609	-.3706	-.3215	-.1650	-.0388	-.1142	-.5690	-.6661	-.2840	-.0588	.0223	.0178
90.000		.9967	.5972	.0870	-.2180	-.1548	.0617	.2455	.3388		-.6409	-.6056	-.1279	-.0054	.0228
120.000			.6768	.1639	-.1565	-.1280	.0540	.2284	.3098	-.1149	.0758	.0107	-.0615	-.0306	.0435
135.000								.1757		.1768		-.0104		-.0594	
150.000			.6657	.1570	-.1827	-.1697	-.0234	.1416	.2168	.3489	.2296	-.0373	-.2613	-.1622	-.0442
165.000				.0956	-.2377	-.2305	-.0631	.0904	.1958	.3575	.3269	-.1699	-.2873	-.1773	-.0360
180.000	.9972	.9851	.5449	.0298	-.2965	-.2781	-.0800	.0676	.1879	.3343	.2857	-.2620	-.3349	-.2308	-.0771
270.000		.5916							.3829						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0487	-.0842	-.3194
30.000	-.0560	-.0657	-.2728
60.000	.0035	.0061	-.1186
90.000	.0077	-.1057	
120.000	.1219	-.1039	.6065
135.000	.1281	.0837	.3519
150.000	.0748	.1469	.3658
165.000	.0815	.1491	.4870
180.000	.0485	.1030	.3046

ALPHAO(3) = -6.110 BETAO (2) = -6.480

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0250	.6416	.2125	-.3009	-.6058	-.6502	-.1026	-.0301	-.0449	-.1859	-.2674	-.1555	-.0779	-.0520	-.0409
30.000			.2987	-.2155	-.5466	-.5434	-.1883	-.0841	-.1149	-.3831	-.3741	-.1749	-.1043	-.0734	-.0447
60.000			.4213	-.0981	-.4175	-.3436	-.1397	-.0192	-.0936	-.5327	-.6491	-.3312	-.0719	.0099	.0239
90.000		.9994	.5517	.0360	-.2799	-.1856	.0533	.2444	.3414		-.6265	-.6217	-.1460	-.0089	.0239
120.000			.6335	.1166	-.2055	-.1614	.0471	.2252	.3147	-.1365	.0407	-.0261	-.1051	-.0534	.0336
135.000								.1742		.1651		-.0520		-.0859	
150.000			.6407	.1178	-.2108	-.1886	-.0229	.1438	.2253	.3360	.1438	-.0368	-.2774	-.1711	-.0377
165.000				.0846	-.2473	-.2393	-.0576	.0988	.2090	.3607	.3025	-.2096	-.2973	-.1760	-.0178
180.000	1.0260	.9991	.5393	.0374	-.2919	-.2765	-.0643	.0800	.2033	.3447	.2894	-.2322	-.3399	-.2197	-.0502
270.000		.6434							.3762						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(3) = -6.110 BETAO (2) = -6.480

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0331	-.0647	-.3165
30.000	-.0355	-.0497	-.2691
60.000	.0067	.0123	-.1185
90.000	.0264	-.0398	
120.000	.1098	-.0966	.5667
135.000	.1152	.0755	.3425
150.000	.0685	.1349	.3247
165.000	.0824	.1404	.4651
180.000	.0854	.1015	.2932

ALPHAO(3) = -6.130 BETAO (3) = -4.820

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0430	.6557	.2213	-.3010	-.6092	-.6043	-.0796	-.0195	-.0339	-.1783	-.2615	-.1579	-.0621	-.0332	-.0247
30.000			.2855	-.2318	-.5564	-.5625	-.1609	-.0597	-.0883	-.3325	-.3662	-.1727	-.0959	-.0634	-.0371
60.000			.3879	-.1277	-.4574	-.3538	-.1223	-.0054	-.0784	-.4974	-.6391	-.3546	-.0879	.0027	.0189
90.000		.9252	.5046	-.0119	-.3208	-.2002	.0436	.2416	.3405		-.6121	-.6613	-.1579	-.0178	.0233
120.000			.5929	.0719	-.2474	-.1870	.0511	.2168	.3172	-.1321	.0138	-.0666	-.1334	-.0765	.0228
135.000								.1685		.1570		-.0884		-.1092	
150.000			.6223	.0976	-.2447	-.2056	-.0270	.1420	.2282	.3255	.0504	-.0596	-.3023	-.1880	-.0475
165.000				.0755	-.2602	-.2327	-.0508	.1086	.2126	.3600	.2776	-.2445	-.2965	-.1949	-.0126
180.000	1.0430	1.0020	.5674	.0414	-.2879	-.2597	-.0520	.0959	.2069	.3476	.2910	-.2678	-.2935	-.2216	-.0396
270.000		.6834							.3666						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0287	-.0593	-.3190
30.000	-.0322	-.0423	-.2740
60.000	.0072	.0103	-.1301
90.000	.0313	-.0133	
120.000	.0957	-.1328	.5486
135.000	.1014	.0548	.3158
150.000	.0528	.1139	.2888
165.000	.0774	.1268	.4134
180.000	.0558	.0955	.2622

ARC11-716 IA14 C1+T12+S12N25+AT1D EXTERNAL TANK (RB1T31)

ALPHAO(3) = -6.140 BETAO (4) = -3.220

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6360
PHI															
.000	1.0360	.6676	.2325	-.2950	-.9525	-.6311	-.0947	-.0086	-.0210	-.1640	-.2481	-.1526	-.0903	-.0161	-.0104
30.000			.2755	-.2430	-.5583	-.5772	-.1365	-.0329	-.0637	-.2819	-.3356	-.1776	-.0774	-.0485	-.0245
60.000			.3605	-.1621	-.4853	-.3692	-.0982	.0147	-.0545	-.4660	-.6128	-.3642	-.0689	-.0062	.0189
90.000		.8929	.4648	-.0523	-.3716	-.2081	.0452	.2460	.3471		-.5071	-.6643	-.1590	-.0215	.0226
120.000			.5516	.0338	-.2927	-.2056	.0489	.2137	.3216	-.1170	-.0119	-.0996	-.1577	-.0684	.0176
135.000								.1646		.1530		-.1041		-.1148	
150.000			.5966	.0722	-.2610	-.2132	-.0267	.1400	.2326	.3127	-.0218	-.1123	-.3134	-.1980	-.0521
165.000				.0746	-.2664	-.2290	-.0430	.1157	.2212	.3591	.2538	-.2714	-.2954	-.1947	-.0129
180.000	1.0360	1.0080	.5761	.0487	-.2794	-.2405	-.0383	.1115	.2163	.3500	.2929	-.2989	-.2816	-.1915	-.0391
270.000		.7269							.3599						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0168	-.0513	-.3209
30.000	-.0185	-.0358	-.2756
60.000	.0134	.0118	-.1411
90.000	.0369	.0017	
120.000	.0855	-.1360	.5076
135.000	.0894	.0401	.2690
150.000	.0463	.0891	.2392
165.000	.0747	.1132	.3778
180.000	.0610	.0849	.2755

ALPHAO(3) = -6.030 BETAO (5) = -1.620

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6360
PHI															
.000	1.0690	.6806	.2368	-.2944	-.9943	-.5850	-.0969	-.0046	-.0174	-.1612	-.2271	-.1520	-.0415	-.0145	-.0026
30.000			.2655	-.2601	-.5661	-.5247	-.1177	-.0155	-.0432	-.2639	-.2999	-.1853	-.0652	-.0375	-.0187
60.000			.3329	-.1922	-.5143	-.3211	-.0785	.0340	-.0362	-.4371	-.5986	-.3909	-.0662	-.0117	.0140
90.000		.8525	.4222	-.0994	-.4282	-.2107	.0454	.2480	.3905		-.5801	-.7290	-.1580	-.0224	.0221
120.000			.5104	-.0162	-.3373	-.2342	.0189	.2056	.3217	-.1002	-.0437	-.1363	-.1848	-.0916	.0096
135.000								.1610		.1494		-.1450		-.1329	
150.000			.5667	.0433	-.2931	-.2315	-.0326	.1359	.2337	.3000	-.0457	-.2103	-.3361	-.2161	-.0584
165.000				.0576	-.2708	-.2406	-.0435	.1129	.2218	.3521	.2296	-.3336	-.3118	-.1957	-.0134
180.000	1.0690	1.0040	.5746	.0478	-.2804	-.2455	-.0353	.1137	.2194	.3486	.2917	-.3226	-.2843	-.1800	-.0251
270.000		.7683							.3531						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T3!)

ALPHAO(3) = -6.030 BETAO (5) = -1.620

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L	.7460	.8530	.9280
PHI			
.000	-.0112	-.0475	-.3193
30.000	-.0192	-.0306	-.2858
60.000	.0078	.0057	-.1546
90.000	.0334	.0049	
120.000	.0735	-.1387	.4225
135.000	.0712	.0270	.1690
150.000	.0213	.0538	.1389
165.000	.0650	.0820	.3515
180.000	.0469	.0661	.2526

ALPHAO(3) = -6.030 BETAO (6) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.0000	.6839	.2379	-.2864	-.9990	-.6401	-.0909	.0008	-.0116	-.1590	-.2238	-.1569	-.0412	-.0121	-.0010
30.000			.2539	-.2721	-.5680	-.5537	-.0919	.0048	-.0205	-.2375	-.3095	-.2078	-.0515	-.0363	-.0198
60.000			.3044	-.2182	-.5429	-.2741	-.0574	.0557	-.0116	-.4075	-.5798	-.4163	-.0665	-.0116	.0081
90.000		.8128	.3776	-.1381	-.4724	-.1967	.0508	.2554	.3590		-.5681	-.7936	-.1564	-.0232	.0190
120.000			.4679	-.0519	-.3987	-.2643	.0115	.2032	.3266	-.0921	-.0709	-.1704	-.2041	-.1054	.0072
135.000								.1549		.1448		-.1894		-.1528	
150.000			.5546	.0116	-.3429	-.2459	-.0457	.1324	.2343	.2901	-.0692	-.3272	-.3569	-.2475	-.0696
165.000				.0425	-.2941	-.2459	-.0497	.1099	.2220	.3476	.2077	-.3724	-.3185	-.2062	-.0239
180.000	1.0690	1.0010	.5781	.0481	-.2651	-.2395	-.0348	.1136	.2203	.3429	.2911	-.3262	-.2708	-.1950	-.0178
270.000		.8118							.3503						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0064	-.0473	-.3141
30.000	-.0123	-.0343	-.2916
60.000	.0047	.0009	-.1632
90.000	.0333	.0034	
120.000	.0617	-.1153	.3560
135.000	.0573	.0026	.1260
150.000	.0076	.0182	.0844
165.000	.0437	.0480	.1501
180.000	.0532	.0604	.0797

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHA0(3) = -6.030 BETA0 (7) = 1.640

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0640	.6844	.2376	-.2688	-.5924	-.6427	-.0826	.0024	-.0100	-.1633	-.2440	-.1631	-.0478	-.0071	-.0009
30.000			.2378	-.2891	-.5900	-.5733	-.0757	.0216	-.0002	-.2120	-.3486	-.2178	-.0413	-.0243	-.0178
60.000			.2746	-.2533	-.5660	-.2953	-.0398	.0773	.0163	-.3767	-.5721	-.4062	-.0995	-.0037	.0078
90.000		.7749	.3258	-.1782	-.5154	-.1911	.0576	.2605	.3675		-.5555	-.7709	-.1662	-.0225	.0171
120.000			.4234	-.0969	-.4403	-.2523	.0044	.2022	.3305	-.0671	-.0876	-.2044	-.2134	-.1126	.0018
135.000								.1489		.1402		-.2365		-.1629	
150.000			.5043	-.0153	-.3745	-.2606	-.0516	.1238	.2333	.2729	-.1353	-.4229	-.3866	-.2340	-.0587
165.000				.0296	-.3254	-.2518	-.0571	.1028	.2176	.3386	.1894	-.3692	-.2730	-.1845	-.0246
180.000	1.0640	.9995	.5762	.0439	-.2948	-.2320	-.0353	.1129	.2127	.3374	.2912	-.3491	-.2559	-.2107	-.0339
270.000		.8515							.3464						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0098	-.0463	-.3120
30.000	-.0093	-.0378	-.2971
60.000	.0099	-.0042	-.1793
90.000	.0350	.0007	
120.000	.0542	-.0821	.3004
135.000	.0505	-.0146	.0535
150.000	.0163	.0054	-.0250
165.000	.0442	.0429	.1414
180.000	.0442	.0537	.1011

ALPHA0(3) = -6.180 BETA0 (8) = 3.330

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0570	.6731	.2332	-.2840	-.6035	-.6390	-.0901	-.0023	-.0149	-.1627	-.2493	-.1541	-.0522	-.0191	-.0121
30.000			.2212	-.3045	-.6023	-.5115	-.0706	.0336	.0099	-.1882	-.3307	-.2236	-.0446	-.0161	-.0186
60.000			.2352	-.2877	-.5896	-.2667	-.0200	.0984	.0343	-.3443	-.5521	-.4278	-.0661	-.0066	.0055
90.000		.7280	.2882	-.2260	-.5426	-.1860	.0694	.2717	.3735		-.5466	-.7799	-.1687	-.0102	.0186
120.000			.3761	-.1385	-.4780	-.2403	.0058	.2004	.3337	-.0353	-.1090	-.2293	-.2203	-.1153	-.0093
135.000								.1422		.1409		-.2777		-.1784	
150.000			.4709	-.0445	-.3961	-.2984	-.0609	.1144	.2333	.2630	-.2047	-.4995	-.3906	-.2288	-.0640
165.000				.0189	-.3362	-.2801	-.0621	.0957	.2152	.3275	.1759	-.3593	-.2625	-.1897	-.0452
180.000	1.0570	1.0010	.5726	.0493	-.2959	-.2559	-.0426	.1063	.2095	.3327	.2885	-.3333	-.2866	-.2387	-.0472
270.000		.8930							.3427						

X/LT	.7480	.8530	.9280
PHI			

ARC11-716 IA14 24+T12+S12N25+AT10 EXTERNAL TANK (RB1731)

ALPHA0(3) = -6.190 BETA0 (8) = 5.330

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9200
PHI			
.000	-.0129	-.0482	-.3125
30.000	-.0129	-.0405	-.3039
60.000	.0052	-.0079	-.1844
90.000	.0271	-.0054	
120.000	.0416	-.0682	.2333
135.000	.3390	-.0015	.0231
150.000	-.0030	-.0469	-.0567
165.000	.0340	.0379	.1143
180.000	.0377	.0578	.0812

ALPHA0(3) = -6.160 BETA0 (8) = 5.010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0390	.6559	.2188	-.2989	-.6010	-.6531	-.1113	-.0211	-.0323	-.1735	-.2658	-.1566	-.0658	-.0345	-.0295
30.000			.1942	-.3284	-.6081	-.4249	-.0719	.0321	.0172	-.1760	-.3231	-.2023	-.0500	-.0204	-.0221
60.000			.1957	-.3209	-.6037	-.2074	-.0146	.1073	.0461	-.3301	-.5579	-.3914	-.0584	-.0071	-.0061
90.000		.6795	.2376	-.2698	-.5685	-.1580	.0734	.2583	.3783		-.5474	-.7184	-.1527	-.0188	.0070
120.000			.3224	-.1902	-.5166	-.2427	-.0040	.1892	.3274	-.0204	-.1367	-.2519	-.2248	-.1149	-.0343
135.000								.1264		.1306		-.3195		-.1735	
150.000			.4285	-.0888	-.4281	-.3515	-.0136	.0960	.2194	.2374	-.2717	-.5378	-.4041	-.2308	-.0869
165.000				-.0086	-.3552	-.3092	-.0795	.0743	.1996	.3031	.1561	-.3737	-.2657	-.2172	-.0849
180.000	1.0390	.9876	.5618	.0396	-.3021	-.2676	-.0547	.0839	.1977	.3176	.2745	-.3320	-.3358	-.2334	-.0782
270.000		.9308							.3353						

X/LT	.7460	.8530	.9200
PHI			
.000	-.0286	-.0546	-.3168
30.000	-.0239	-.0508	-.3200
60.000	-.0032	-.0178	-.1974
90.000	.0134	-.0129	
120.000	.0178	-.0578	.1976
135.000	.0128	-.0090	.0115
150.000	-.0328	-.0640	-.0788
165.000	.0173	.0228	.1205
180.000	.0143	.0401	.1116

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(3) = -6.140 BETAO (10) = 6.740

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0170	.6348	.2030	-.3088	-.6029	-.6611	-.1285	-.0360	-.0480	-.1796	-.2751	-.1553	-.0808	-.0519	-.0439
30.000			.1617	-.3400	-.6359	-.4078	-.0598	.0367	.0245	-.1567	-.3222	-.2035	-.0569	-.0273	-.0350
60.000			.1605	-.3423	-.6195	-.1989	-.0030	.1201	.0578	-.3053	-.5471	-.3855	-.0631	-.0066	-.0133
90.000		.6324	.1960	-.3083	-.5910	-.1466	.0688	.2525	.3869		-.5506	-.6585	-.1579	-.0153	-.0096
120.000			.2777	-.2286	-.5455	-.2602	-.0025	.1866	.3309	-.0106	-.1567	-.2625	-.2177	-.1354	-.0662
135.000								.1131		.1258		-.3367		-.2020	
150.000			.3869	-.1214	-.4642	-.4258	-.0882	.0798	.2114	.2186	-.3222	-.5689	-.3696	-.2533	-.1303
165.000				-.0316	-.3740	-.3435	-.0931	.0571	.1846	.2739	.1298	-.3755	-.2936	-.2449	-.1160
180.000	1.0170	.9294	.5509	.0306	-.3120	-.2880	-.0627	.0706	.1858	.2980	.2687	-.3143	-.3661	-.2590	-.1090
270.000		.9724							.3323						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0332	-.0664	-.3174
30.000	-.0327	-.0542	-.3198
60.000	-.0103	-.0251	-.1946
90.000	.0003	-.0256	
120.000	.0018	-.0629	.1921
135.000	.0032	-.0165	-.0001
150.000	-.0629	-.0803	-.1070
165.000	-.0086	.0078	.0997
180.000	-.0212	.0115	.1098

ALPHAO(3) = -6.140 BETAO (11) = 8.500

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9823	.5972	.1866	-.3154	-.6271	-.6590	-.1523	-.0568	-.0696	-.1963	-.2801	-.1592	-.0940	-.0731	-.0603
30.000			.1333	-.3563	-.6579	-.3901	-.0511	.0448	.0319	-.1521	-.3250	-.2106	-.0611	-.0377	-.0475
60.000			.1235	-.3462	-.6464	-.1614	.0101	.1161	.0704	-.2848	-.5510	-.3593	-.0451	-.0126	-.0203
90.000		.5793	.1510	-.3470	-.6213	-.1323	.0582	.2456	.3911		-.5485	-.1607	-.1250	-.0206	-.0201
120.000			.2318	-.2669	-.5773	-.2322	-.0109	.1769	.3232	-.0034	-.1739	-.3016	-.2278	-.1646	-.0898
135.000								.1009		.1178		-.3922		-.2893	
150.000			.3453	-.1560	-.4835	-.4644	-.1061	.0595	.1985	.1896	-.3288	-.6182	-.3708	-.2754	-.1567
165.000				-.0532	-.3845	-.3742	-.1219	.0289	.1606	.2454	.1057	-.3750	-.3354	-.2766	-.1371
180.000	.9823	.9025	.5404	.0202	-.3134	-.3048	-.0858	.0509	.1537	.2817	.2490	-.4705	-.4078	-.3036	-.1581
270.000		.9991							.3283						

X/LT	.7460	.8530	.9280
PHI			

DATE 08 JAN 75 TABULATED PRESSURE DATA - IA14A - VOL. 9

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(3) = -6.140 BETAO (°1) = 8.500

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0533	-.0838	-.3198
30.000	-.0399	-.0609	-.3183
60.000	-.0237	-.0435	-.1942
90.000	-.0185	-.0485	
120.000	-.0217	-.0903	.1695
135.000	-.0205	-.0249	-.0135
150.000	-.0851	-.0908	-.1298
165.000	-.0378	-.0098	.0844
180.000	-.0634	-.0165	.1032

ALPHAO(4) = -4.170 BETAO (1) = -9.980

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9790	.6302	.2263	-.2718	-.5949	-.6330	-.1790	-.0783	-.0867	-.2047	-.2710	-.1628	-.1131	-.0972	-.0927
30.000			.3653	-.1347	-.4702	-.4861	-.3091	-.1216	-.1541	-.4657	-.3676	-.1658	-.1258	-.1049	-.0785
60.000			.5329	.0262	-.2968	-.2766	-.1260	-.0033	-.0573	-.7159	-.6018	-.2176	-.0126	.0206	.0116
90.000		1.0520	.6621	.1524	-.1650	-.1159	.0856	.2678	.3758		-.5830	-.5289	-.0758	-.0201	.0114
120.000			.6920	.1843	-.1428	-.1150	.0493	.2087	.2623	-.2520	.0704	.0555	-.0128	-.0069	.0558
135.000								.1435		.1306		.0138		-.0349	
150.000			.6356	.1294	-.2066	-.1998	-.0570	.1028	.1622	.3184	.2652	-.0737	-.2465	-.1601	-.0402
165.000				.0418	-.2981	-.2944	-.1062	.0433	.1471	.3263	.3076	-.1136	-.2715	-.1908	-.0397
180.000	.9790	.9248	.4727	-.0354	-.3631	-.3387	-.1181	.0267	.1513	.3054	.2640	-.6710	-.3174	-.2443	-.0940
270.000		.5533							.4433						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0727	-.1023	-.3280
30.000	-.0717	-.0775	-.2887
60.000	.0184	.0279	-.1298
90.000	.0014	-.1247	
120.000	.1472	-.0297	.6584
135.000	.1551	.1265	.3721
150.000	.0969	1799	.4292
165.000	.0993	.1803	.5103
180.000	.0575	.1281	.3145

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(4) = -4.190 BETAO (2) = -7.970

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0260	.6753	.2528	-.2595	-.5850	-.6280	-.1354	-.0458	-.0565	-.1885	-.2645	-.1546	-.0923	-.0694	-.0645
30.000			.3613	-.1509	-.4931	-.5028	-.2146	-.0832	-.1113	-.4101	-.3481	-.1457	-.1098	-.0856	-.0583
60.000			.4932	-.0217	-.3432	-.2995	-.1065	.0172	-.0380	-.6891	-.5979	-.2444	-.0515	.0168	.0154
90.000		1.0160	.6072	.0878	-.2234	-.1528	.0718	.2630	.3803		-.5865	-.5936	-.0807	-.0199	.0164
120.000			.6463	.1296	-.1950	-.1538	.0367	.2045	.2687	-.2515	.0256	.0159	-.0595	-.0401	.0377
135.000								.1472		.1185		-.0169		-.0684	
150.000			.6178	.1008	-.2371	-.2222	-.0461	.1144	.1771	.3084	.2122	-.0531	-.2537	-.1635	-.0343
165.000				.0369	-.3070	-.2970	-.0859	.0662	.1673	.3329	.3122	-.1761	-.2776	-.1712	-.0192
180.000	1.0260	.9453	.4930	-.0243	-.3696	-.3259	-.0919	.0490	.1705	.3193	.2785	-.2589	-.3310	-.2215	-.0623
270.000		.6212							.4365						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0499	-.0740	-.3142
30.000	-.0454	-.0516	-.2777
60.000	.0180	.0348	-.1201
90.000	.0291	-.0424	
120.000	.1329	-.0392	.6123
135.000	.1391	.1167	.3671
150.000	.0912	.1709	.3815
165.000	.0997	.1685	.5007
180.000	.0672	.1248	.3135

ALPHAO(4) = -4.210 BETAO (3) = -5.970

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0600	.7091	.2721	-.2500	-.5768	-.5862	-.0687	-.0206	-.0300	-.1786	-.2542	-.1496	-.0722	-.0414	-.0354
30.000			.3543	-.1662	-.5122	-.5327	-.1709	-.0478	-.0721	-.3633	-.3180	-.1521	-.0889	-.0709	-.0428
60.000			.4609	-.0610	-.4053	-.3278	-.0947	.0375	-.0124	-.6398	-.5886	-.2799	-.0642	.0053	.0184
90.000		.9753	.5558	.0315	-.2920	-.1859	.0623	.2642	.3853		-.5794	-.6607	-.1001	-.0186	.0211
120.000			.5979	.0812	-.2542	-.1871	.0262	.2059	.2773	-.2399	-.0132	-.0237	-.1056	-.0765	.0270
135.000								.1502		.1094		-.0617		-.1073	
150.000			.5920	.0738	-.2814	-.2337	-.0431	.1183	.1925	.3003	.1090	-.0477	-.2805	-.1848	-.0342
165.000				.0247	-.3246	-.2727	-.0724	.0810	.1812	.3400	.2860	-.2220	-.2850	-.1890	-.0130
180.000	1.0600	.9571	.5100	-.0209	-.3700	-.3009	-.0702	.0686	.1851	.3277	.2833	-.2382	-.3104	-.2184	-.0357
270.000		.6847							.4254						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(4) = -4.210 BETAO (3) = -5.970

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0307	-.0559	-.3080
30.000	-.0223	-.0347	-.2702
60.000	.0204	.0334	-.1214
90.000	.0443	.0052	
120.000	.1141	-.0447	.5700
135.000	.1203	.1056	.3513
150.000	.0803	.1551	.3370
165.000	.0949	.1619	.4662
180.000	.0711	.1243	.2899

ALPHAO(4) = -4.190 BETAO (4) = -3.980

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0770	.7244	.2824	-.2466	-.5622	-.6147	-.0804	-.0122	-.0149	-.1686	-.2334	-.1525	-.0585	-.0231	-.0179
30.000			.3358	-.1894	-.5214	-.5637	-.1303	-.0248	-.0434	-.3261	-.3031	-.1612	-.0695	-.0585	-.0350
60.000			.4194	-.1058	-.4521	-.3458	-.0835	.0536	.0061	-.5824	-.5730	-.3056	-.0667	-.0045	.0109
90.000		.9320	.5019	-.0281	-.3661	-.1969	.0581	.2631	.3892		-.5740	-.7409	-.1080	-.0231	.0178
120.000			.5530	.0267	-.3155	-.2058	.0228	.2009	.2831	-.2262	-.0510	-.0768	-.1358	-.0928	.0155
135.000								.1503		.1015		-.1024		-.1218	
150.000			.5644	.0307	-.3209	-.2367	-.0419	.1218	.1978	.2875	.0009	-.0858	-.2981	-.1949	-.0454
165.000				.0137	-.3403	-.2605	-.0646	.0933	.1881	.3341	.2548	-.2537	-.2859	-.1974	-.0149
180.000	1.0770	.9597	.5152	-.0155	-.3649	-.2708	-.0599	.0931	.1884	.3292	.2822	-.2948	-.2781	-.2220	-.0404
270.000		.7294							.4125						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0194	-.0465	-.3084
30.000	-.0149	-.0278	-.2727
60.000	.0185	.0264	-.1358
90.000	.0464	.0182	
120.000	.1001	-.0830	.5464
135.000	.1028	.0786	.3122
150.000	.0659	.1288	.2933
165.000	.0918	.1444	.3921
180.000	.0751	.1151	.2690

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(4) = -4.180 BETAO (5) = -1.980

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0900	.7374	.2921	-.2374	-.5683	-.6204	-.0914	.0018	-.0034	-.1609	-.2167	-.1472	-.0483	-.0113	-.0044
30.000			.3220	-.2030	-.5337	-.5853	-.1042	.0004	-.0150	-.2793	-.2734	-.1779	-.0505	-.0397	-.0274
60.000			.3833	-.1459	-.4900	-.3359	-.0638	.0743	.0315	-.5313	-.5507	-.3442	-.0560	-.0081	.0085
90.000		.8675	.4459	-.0772	-.4289	-.1853	.0622	.2681	.3964		-.5619	-.7597	-.1201	-.0200	.0186
120.000			.5013	-.0222	-.3724	-.2667	.0216	.2008	.2936	-.2059	-.0840	-.1214	-.1631	-.1146	.0116
135.000								.1502		.1021		-.1327		-.1511	
150.000			.5313	.0051	-.3582	-.2380	-.0417	.1232	.2074	.2768	-.0622	-.1784	-.3215	-.2242	-.0522
165.000				.0045	-.3641	-.2444	-.0588	.0997	.1985	.3322	.2248	-.3195	-.2920	-.2130	-.0108
180.000	1.0900	.9642	.5220	-.0116	-.3705	-.2498	-.0514	.0985	.1988	.3263	.2833	-.3187	-.2651	-.1857	-.0259
270.000		.7847							.4051						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0059	-.0377	-.3029
30.000	-.0086	-.0234	-.2735
60.000	.0183	.0222	-.1482
90.000	.0464	.0279	
120.000	.0859	-.0844	.4704
135.000	.0877	.0606	.2356
150.000	.0381	.0914	.1913
165.000	.0767	.1173	.3733
180.000	.0582	.0962	.2683

ALPHAO(4) = -4.180 BETAO (6) = .030

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0900	.7399	.2902	-.2418	-.5693	-.6305	-.0841	.0089	-.0006	-.1579	-.2117	-.1495	-.0397	-.0063	-.0005
30.000			.3012	-.2316	-.5527	-.5974	-.0802	.0230	.0051	-.2357	-.2602	-.1903	-.0374	-.0258	-.0219
60.000			.3371	-.1902	-.5160	-.3185	-.0402	.0943	.0510	-.4730	-.5457	-.3827	-.0544	-.0056	.0096
90.000		.8360	.3917	-.1313	-.4708	-.1736	.0691	.2734	.4035		-.5490	-.7211	-.1164	-.0138	.0212
120.000			.4514	-.0728	-.4256	-.2184	.0144	.1980	.3017	-.1735	-.1156	-.1619	-.1864	-.1101	.0045
135.000								.1466		.1082		-.1921		-.1547	
150.000			.5001	-.0251	-.3926	-.2407	-.0434	.1214	.2145	.2635	-.0745	-.3200	-.3418	-.2427	-.0808
165.000				-.0094	-.3611	-.2666	-.0560	.0977	.2027	.3249	.1949	-.3613	-.2975	-.2097	-.0241
180.000	1.0900	.9621	.5272	-.0060	-.3537	-.2409	-.0434	.1017	.2005	.3173	.2767	-.3394	-.2499	-.1983	-.0172
270.000		.8370							.3976						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(4) = -4.180 BETAO (6) = .030

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0053	-.0318	-.3000
30.000	-.0103	-.0229	-.2801
60.000	.0139	.0130	-.1600
90.000	.0425	.0226	
120.000	.0715	-.0893	.3959
135.000	.0674	.0253	.1401
150.000	.0199	.0446	.1230
165.000	.0592	.0656	.1376
180.000	.0657	.0733	.0745

ALPHAO(4) = -4.170 BETAO (7) = 2.020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0880	.7405	.2942	-.2355	-.5658	-.6127	-.0739	.0059	-.0040	-.1598	-.2190	-.1480	-.0464	-.0117	-.0006
30.000			.2890	-.2415	-.5729	-.6080	-.0716	.0346	.0261	-.2032	-.2701	-.1884	-.0406	-.0115	-.0136
60.000			.2986	-.2239	-.5553	-.3237	-.0205	.1111	.0755	-.4133	-.5221	-.3820	-.0467	-.0031	.0049
90.000		.7874	.3399	-.1804	-.5092	-.1777	.0785	.2786	.4143		-.5383	-.6636	-.1312	-.0055	.0177
120.000			.4008	-.1203	-.4617	-.2125	.0131	.1969	.3056	-.1424	-.1378	-.1969	-.2000	-.1113	-.0001
135.000								.1435		.1090		-.2405		-.1647	
150.000			.4627	-.0614	-.4172	-.2872	-.0487	.1146	.2174	.2487	-.1528	-.4266	-.3753	-.2370	-.0561
165.000				-.0248	-.3844	-.2646	-.0626	.0896	.2011	.3145	.1711	-.3591	-.2629	-.1707	-.0280
180.000	1.0880	.9583	.5242	-.0095	-.3687	-.2602	-.0455	.0923	.1920	.3123	.2793	-.3544	-.2521	-.2106	-.0325
270.000		.8864							.3940						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0053	-.0336	-.3015
30.000	-.0098	-.0240	-.2878
60.000	.0122	.0082	-.1674
90.000	.0401	.0231	
120.000	.0594	-.0601	.3207
135.000	.0579	.0112	.0647
150.000	.0303	.0228	-.0275
165.000	.0573	.0605	.1487
180.000	.0598	.0753	.0890

ARC11-716 IA14 O1+T12+912N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(4) = -4.240 BETAO (8) = 4.040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0700	.7171	.2788	-.2458	-.5631	-.6153	-.0949	-.0079	-.0152	- 1680	-.2264	-.1542	-.0590	-.0216	-.0159
30.000			.2532	-.2820	-.5890	-.5269	-.0660	.0412	.0352	-.1784	-.2717	-.2016	-.0443	-.0093	-.0154
60.000			.2480	-.2805	-.5777	-.2381	-.0069	.1239	.0980	-.3618	-.5138	-.3952	-.0438	-.0004	-.0058
90.000		.7306	.2815	-.2381	-.5413	-.2180	.0928	.2934	.4234		-.5226	-.6172	-.1399	-.0041	.0152
120.000			.3426	-.1720	-.5102	-.3057	.0163	.1983	.3134	-.1075	-.1604	-.2302	-.2107	-.1107	-.0108
135.000								.1390		.1079		-.2935		-.1630	
150.000			.4179	-.1046	-.4483	-.3864	-.0594	.1084	.2148	.2357	-.2328	-.5168	-.3964	-.2277	-.0669
165.000				-.0461	-.4004	-.3265	-.0742	.0795	.1929	.3032	.1547	-.3585	-.2536	-.1985	-.0545
180.000	1.0700	.9608	.5166	-.0093	-.3619	-.2927	-.0601	.0797	.1877	.3074	.2710	-.3418	-.2942	-.2439	-.0553
270.000		.9326							.3849						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0184	-.0446	-.3018
30.000	-.0120	-.0321	-.3016
60.000	.0028	-.0015	-.1822
90.000	.0341	.0158	
120.000	.0481	-.0321	.2392
135.000	.0397	.0210	.0407
150.000	-.0185	-.0235	-.0295
165.000	.0442	.0587	.1393
180.000	.0462	.0738	.1119

ALPHAO(4) = -4.230 BETAO (9) = 6.050

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0430	.6950	.2653	-.2553	-.5748	-.6289	-.1238	-.0277	-.0361	-.1861	-.2478	-.1566	-.0750	-.0437	-.0373
30.000			.2140	-.3033	-.6139	-.5365	-.0603	.0440	.0409	-.1667	-.2809	-.1941	-.0538	-.0218	-.0213
60.000			.2051	-.3184	-.6041	-.2003	-.0025	.1297	.1202	-.3316	-.5269	-.3608	-.0366	-.0104	-.0124
90.000		.6689	.2273	-.2855	-.5799	-.1272	.0887	.2762	.4315		-.5251	-.5449	-.1047	-.0132	-.0085
120.000			.2848	-.2222	-.5398	-.2218	.0118	.1925	.3066	-.0807	-.1912	-.2480	-.2124	-.1237	-.0422
135.000								.1296		.1049		-.3228		-.1848	
150.000			.3704	-.1451	-.4836	-.3850	-.0718	.0948	.2060	.2139	-.3145	-.5414	-.3733	-.2493	-.1028
165.000				-.0772	-.4180	-.3853	-.0933	.0599	.1757	.2692	.1275	-.3705	-.2740	-.2381	-.0884
180.000	1.0430	.9117	.5013	-.0280	-.3591	-.3442	-.0765	.0617	.1639	.2874	.2578	-.3406	-.3476	-.2575	-.0969
270.000		.9807							.3751						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(4) = -4.230 BETAO (9) = 6.050

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0358	-.0580	-.3074
30.000	-.0225	-.0433	-.3069
60.000	-.0072	-.0146	-.1851
90.000	.0107	.0042	
120.000	.0216	-.0225	.2121
135.000	.0191	.0178	.0289
150.000	-.0388	-.0433	-.0587
165.000	.0131	.0405	.1335
180.000	.0084	.0531	.1273

ALPHAO(4) = -4.200 BETAO (10) = 8.070

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0140	.6657	.2446	-.2638	-.5841	-.6315	-.1427	-.0494	-.0560	-.1947	-.2603	-.1540	-.0916	-.0679	-.0616
30.000			.1795	-.3214	-.6266	-.5028	-.0609	.0465	.0485	-.1507	-.3038	-.1941	-.0582	-.0350	-.0371
60.000			.1604	-.3444	-.6210	-.1803	.0070	.1359	.1301	-.3081	-.5330	-.3286	-.0370	-.0170	-.0255
90.000		.6183	.1755	-.3234	-.613.	-.1234	.0832	.2633	.4422		-.5273	-.4498	-.0726	-.0218	-.0417
120.000			.2386	-.2724	-.5760	-.1969	.0149	.1886	.3024	-.0615	-.2133	-.2625	-.2147	-.1457	-.0746
135.000								.1222		.1019		-.3550		-.2106	
150.000			.3275	-.1861	-.5126	-.4699	-.0791	.0779	.2018	.1939	-.3416	-.5856	-.3577	-.2638	-.1383
165.000				-.0975	-.4291	-.4259	-.1078	.0325	.1582	.2479	.0978	-.3712	-.3052	-.2611	-.1217
180.000	1.0140	.6548	.4896	-.0328	-.3702	-.3671	-.0890	.0419	.1467	.2713	.2427	-.3580	-.3796	-.2866	-.1380
270.000		1.0190							.3754						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0486	-.0692	-.3155
30.000	-.0269	-.0441	-.3001
60.000	-.0180	-.0287	-.1701
90.000	-.0136	-.0178	
120.000	-.0018	-.0486	.1921
135.000	-.0023	.0079	.0216
150.000	-.0590	-.0585	-.0843
165.000	-.0111	.0191	.1164
180.000	-.0319	.0137	.1229

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(4) = -4.200 BETAO (11) = 10.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9783	.6234	.2175	-.2826	-.5977	-.6374	-.1981	-.0789	-.0879	-.2142	-.2683	-.1713	-.1191	-.1013	-.0891
30.000			.1372	-.3657	-.6458	-.5787	-.0848	.0337	.0459	-.1466	-.3070	-.1903	-.0740	-.0578	-.0572
60.000			.1151	-.3647	-.6568	-.1569	.0112	.1291	.1285	-.3005	-.5406	-.3118	-.0427	-.0361	-.0430
90.000		.5578	.1265	-.3704	-.6106	-.0987	.0625	.2098	.4551		-.5441	-.3952	-.0539	-.0400	-.0792
120.000			.1843	-.3174	-.6133	-.1913	.0132	.1786	.2954	-.0635	-.2383	-.2944	-.2165	-.1788	-.1140
135.000								.1103		.0917		-.4042		-.2439	
150.000			.2794	-.2268	-.5520	-.5560	-.0974	.0614	.1852	.1525	-.3350	-.6348	-.3865	-.2929	-.1574
165.000				-.1245	-.4569	-.4878	-.1367	.0083	.1305	.2046	.0767	-.3815	-.3679	-.3160	-.1562
180.000	.9783	.7954	.4798	-.0453	-.3772	-.3903	-.1100	.0231	.1104	.2406	.2200	-.5882	-.4967	-.3425	-.1858
270.000		1.0560							.3668						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0725	-.1042	-.3245
30.000	-.0399	-.0602	-.3000
60.000	-.0399	-.0523	-.1673
90.000	-.0520	-.0627	
120.000	-.0315	-.0721	.1411
135.000	-.0221	-.0104	-.0125
150.000	-.0749	-.0699	-.1313
165.000	-.0443	-.0022	.0972
180.000	-.0774	-.0130	.1051

ALPHAO(5) = -2.870 BETAO (1) = -9.990

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9915	.6668	.2632	-.2436	-.5746	-.6138	-.1893	-.0812	-.0873	-.2054	-.2684	-.1515	-.1103	-.1076	-.1013
30.000			.4068	-.1010	-.4358	-.4623	-.2772	-.1064	-.1322	-.4391	-.3285	-.1490	-.1153	-.1021	-.0758
60.000			.5627	.0492	-.2784	-.2569	-.0926	.0312	-.0110	-.7181	-.5523	-.1577	-.0150	.0181	.0115
90.000		1.0640	.6668	.1542	-.1651	-.1139	.0902	.2751	.3925		-.5694	-.5351	-.0861	-.0267	.0103
120.000			.6740	.1596	-.1622	-.1398	.0329	.1863	.2313	-.3240	.0227	.0676	-.0032	-.0077	.0560
135.000								.1168		.0978		.0182		-.0329	
150.000			.6013	.0918	-.2410	-.2370	-.0856	.0785	.1301	.2979	.2448	-.0931	-.2358	-.1492	-.0333
165.000				-.0014	-.3320	-.3433	-.1216	.0248	.1241	.3092	.2929	-.1086	-.2530	-.1807	-.0234
180.000	.9915	.8929	.4333	-.0740	-.3967	-.3972	-.1240	.0139	.1377	.2929	.2547	-.5959	-.3031	-.2259	-.0799
270.000		.5641							.4702						

X/LT	.7480	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHA0(5) = -2.870 BETA0 (1) = -9.990

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0774	-.1021	-.3321
30.000	-.0660	-.0714	-.2942
60.000	.0249	.0464	-.1302
90.000	.0160	-.0886	
120.000	.1554	.0023	.6693
135.000	.1633	.1455	.3817
150.000	.1111	.1968	.4288
165.000	.1135	.1974	.5204
180.000	.0742	.1441	.3250

ALPHA0(5) = -2.890 BETA0 (2) = -7.990

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0360	.7128	.2905	-.2277	-.5664	-.5993	-.1409	-.0437	-.0507	-.2002	-.2858	-.1278	-.0809	-.0738	-.0728
30.000			.4000	-.1157	-.4685	-.4805	-.2056	-.0638	-.0866	-.3952	-.3145	-.1385	-.1010	-.0850	-.0586
60.000			.5254	.0024	-.3373	-.2837	-.0875	.0499	.0110	-.6925	-.5374	-.2030	-.0455	.0135	.0145
90.000		1.0240	.6115	.0920	-.2362	-.1573	.0765	.2725	.3978		-.5719	-.6293	-.0997	-.0215	.0173
120.000			.6269	.1116	-.2230	-.1774	.0210	.1844	.2390	-.3197	-.0286	.0207	-.0528	-.0427	.0360
135.000								.1239		.0855		-.0212		-.0713	
150.000			.5832	.0643	-.2764	-.2563	-.0655	.0920	.1498	.2861	.1993	-.0657	-.2414	-.1637	-.0265
165.000				-.0036	-.3473	-.3434	-.1029	.0464	.1463	.3140	.2994	-.1664	-.2394	-.1756	-.0100
180.000	1.0360	.9152	.4563	-.0657	-.4027	-.3806	-.1041	.0323	.1574	.3044	.2708	-.2357	-.3077	-.2099	-.0487
270.000		.6326							.4593						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0565	-.0731	-.3127
30.000	-.0379	-.0467	-.2818
60.000	.0211	.0460	-.1232
90.000	.0350	-.0227	
120.000	.1364	-.0017	.6209
135.000	.1461	.1375	.3715
150.000	.1014	.1850	.3787
165.000	.1128	.1833	.5014
180.000	.0804	.1402	.3186

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHA0(3) = -2.870 BETA0 (3) = -5.970

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0880	.7426	.3066	-.2168	-.5596	-.6132	-.1003	-.0233	-.0270	-.1813	-.2679	-.1133	-.0629	-.0440	-.0394
30.000			.3924	-.1325	-.4901	-.4939	-.1655	-.0340	-.0532	-.3533	-.3003	-.1365	-.0750	-.0688	-.0384
60.000			.4870	-.0386	-.3893	-.3013	-.0828	.0632	.0328	-.6514	-.5500	-.2410	-.0334	.0055	.0134
90.000		.9869	.5571	.0370	-.3012	-.1780	.0672	.2710	.4039		-.5672	-.6733	-.1024	-.0226	.0142
120.000			.5813	.0584	-.2809	-.1347	.0138	.1870	.2455	-.2984	-.0643	-.0214	-.0825	-.0737	.0265
135.000								.1316		.0785		-.0591		-.1028	
150.000			.5557	.0289	-.3142	-.2655	-.0559	.1015	.1643	.2748	.1082	-.0463	-.2559	-.1709	-.0280
165.000				-.0165	-.3672	-.3074	-.0851	.0684	.1604	.3201	.2777	-.1988	-.2522	-.1789	-.0013
180.000	1.0690	.9225	.4695	-.0613	-.4175	-.3072	-.0791	.0617	.1685	.3120	.2740	-.2707	-.2606	-.2043	-.0193
270.000		.6879							.4472						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0349	-.0527	-.2978
30.000	-.0166	-.0295	-.2721
60.000	.0256	.0404	-.1246
90.000	.0446	.0102	
120.000	.1216	-.0065	.5721
135.000	.1277	.1245	.3564
150.000	.0912	.1671	.3465
165.000	.1069	.1751	.4659
180.000	.0858	.1405	.2923

ALPHA0(5) = -2.860 BETA0 (4) = -3.980

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0890	.7625	.3234	-.2079	-.5408	-.5889	-.0707	-.0024	-.0051	-.1679	-.2485	-.1148	-.0472	-.0251	-.0199
30.000			.3750	-.1516	-.4976	-.5541	-.1240	-.0046	-.0194	-.3069	-.2800	-.1446	-.0535	-.0558	-.0337
60.000			.4452	-.0825	-.4341	-.2999	-.0660	.0839	.0548	-.6273	-.5355	-.2765	-.0391	-.0022	.0116
90.000		.9403	.5072	-.0170	-.3811	-.1828	.0673	.2753	.4128		-.5653	-.6782	-.1114	-.0223	.0190
120.000			.5363	.0129	-.3511	-.2076	.0171	.1918	.2577	-.2748	-.0997	-.0692	-.1186	-.1008	.0182
135.000								.1394		.0760		-.1013		-.1261	
150.000			.5341	.0102	-.3562	-.2627	-.0487	.1131	.1791	.2679	.0046	-.0814	-.2743	-.2009	-.0383
165.000				-.0229	-.3794	-.3026	-.0697	.0851	.1725	.3208	.2486	-.2332	-.2607	-.1989	-.0049
180.000	1.0690	.9285	.4807	-.0496	-.4092	-.2712	-.0636	.0848	.1791	.3134	.2741	-.3084	-.2497	-.2113	-.0292
270.000		.7438							.4384						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHA0(5) = -2.860 BETA0 (4) = -3.980

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0143	-.0384	-.2824
30.000	-.0064	-.0161	-.2596
60.000	.0236	.0360	-.1314
90.000	.0528	.0293	
120.000	.1096	-.0461	.3504
135.000	.1113	.1027	.3190
150.000	.0782	.1446	.3012
165.000	.1044	.1640	.3966
180.000	.0905	.1359	.2793

ALPHA0(5) = -2.840 BETA0 (5) = -1.990

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1010	.7742	.3286	-.2042	-.5415	-.5953	-.0913	.0057	.0026	-.1586	-.2074	-.1253	-.0437	-.0167	-.0102
30.000			.3603	-.1737	-.5101	-.5623	-.0918	.0153	.0033	-.2647	-.2548	-.1517	-.0561	-.0312	-.0260
60.000			.4047	-.1266	-.4721	-.2873	-.0487	.0975	.0720	-.5864	-.5386	-.3073	-.0194	.0063	.0061
90.000		.8949	.4495	-.0753	-.4259	-.1812	.0709	.2778	.4195		-.5635	-.5619	-.1057	-.0232	.0158
120.000			.4857	-.0384	-.4013	-.2288	.0180	.1902	.2665	-.2512	-.1233	-.1148	-.1476	-.1078	.0090
135.000								.1408		.0775		-.1311		-.1463	
150.000			.5000	-.0295	-.3895	-.2427	-.0477	.1149	.1891	.2589	-.0802	-.1747	-.3014	-.2330	-.0515
165.000				-.0344	-.3934	-.2667	-.0650	.0865	.1840	.3129	.2169	-.3098	-.2757	-.2097	-.0090
180.000	1.1010	.9291	.4800	-.0471	-.4052	-.2751	-.0549	.0873	.1859	.3092	.2725	-.3380	-.2301	-.1868	-.0221
270.000		.7961							.4282						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0068	-.0295	-.2808
30.000	-.0075	-.0130	-.2588
60.000	.0206	.0273	-.1429
90.000	.0495	.0362	
120.000	.0927	-.0410	.4693
135.000	.0939	.0798	.2337
150.000	.0437	.1041	.1968
165.000	.0867	.1309	.3693
180.000	.0699	.1064	.2631

ARC11-716 IA14 O4+T12+S12N25+AT10 EXTERNAL TANK (R81T31)

ALPHA0(5) = -2.040 BETA0 (6) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1020	.7756	.3265	-.2002	-.5490	-.6032	-.0835	.0112	.0065	-.1490	-.1996	-.1316	-.0448	-.0138	.0003
30.000			.3347	-.2000	-.5390	-.5822	-.0781	.0317	.0233	-.2255	-.2426	-.1630	-.0537	-.0343	-.0206
60.000			.3598	-.1670	-.4957	-.3140	-.0285	.1119	.0914	-.5339	-.5420	-.3135	-.0217	.0013	.0033
90.000		.8462	.3968	-.1291	-.4639	-.1789	.0786	.2836	.4253		-.5713	-.5131	-.1070	-.0179	.0042
120.000			.4388	-.0880	-.4314	-.2888	.0199	.1945	.2824	-.2183	-.1474	-.1481	-.1607	-.[illegible]	.0071
135.000								.1415		.0839		-.1917		-.1546	
150.000			.4708	-.0551	-.4111	-.2658	-.0441	.1161	.1999	.2466	-.0817	-.3105	-.3107	-.2339	-.0700
165.000				-.0430	-.4047	-.3159	-.0574	.0911	.1889	.3099	.1852	-.3499	-.2753	-.1921	-.0197
180.000	1.1020	.9312	.4905	-.0457	-.3979	-.3049	-.0468	.0953	.1864	.3050	.2706	-.3526	-.2312	-.1844	-.0057
270.000		.8494							.4227						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0005	-.0228	-.2823
30.000	-.0057	-.0127	-.2581
60.000	.0180	.0229	-.1472
90.000	.0441	.0404	
120.000	.0761	-.0474	.4078
135.000	.0779	.0350	.1445
150.000	.0320	.0560	.1343
165.000	.0671	.0812	.1385
180.000	.0726	.0849	.0723

ALPHA0(5) = -2.040 BETA0 (7) = 2.040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0990	.7710	.3261	-.2036	-.5455	-.5795	-.0890	.0029	.0010	-.1577	-.2163	-.1292	-.0444	-.0195	-.0107
30.000			.3130	-.2110	-.5568	-.5900	-.0724	.0376	.0355	-.2064	-.2618	-.1608	-.0509	-.0377	-.0216
60.000			.3152	-.2091	-.5431	-.2866	-.0126	.1229	.1144	-.5167	-.5566	-.3150	-.0160	-.0064	.0016
90.000		.7949	.3432	-.1808	-.5004	-.2165	.0867	.2903	.4335		-.5809	-.2263	-.0544	-.0361	-.0302
120.000			.3843	-.1365	-.4747	-.2082	.0164	.1943	.2888	-.1970	-.1663	-.1611	-.1498	-.1116	.0017
135.000								.1388		.0818		-.2313		-.1574	
150.000			.4322	-.0902	-.4427	-.2942	-.0484	.1122	.2028	.2309	-.1464	-.4183	-.3489	-.2354	-.0551
165.000				-.0622	-.4185	-.3145	-.0643	.0839	.1856	.3002	.1611	-.3474	-.2383	-.1636	-.0212
180.000	1.0990	.9240	.4858	-.0505	-.3970	-.2981	-.0546	.0826	.1753	.2960	.2675	-.3695	-.2325	-.1950	-.0239
270.000		.8932							.4117						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHA0(5) = -2.040 BETA0 (7) = 2.040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0090	-.0284	-.2827
30.000	-.0055	-.0173	-.2655
60.000	.0172	.0173	-.1434
90.000	.0334	.0326	
120.000	.0397	-.0282	.3131
135.000	.0632	.0215	.0740
150.000	.0418	.0400	-.0170
165.000	.0628	.0760	.1573
180.000	.0660	.0881	.0977

ALPHA0(5) = -2.080 BETA0 (8) = 4.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0830	.7531	.3145	-.2128	-.5402	-.6043	-.0920	-.0068	-.0101	-.1714	-.2387	-.1286	-.0801	-.0281	-.0219
30.000			.2732	-.2549	-.5767	-.6041	-.0626	.0441	.0467	-.1890	-.3208	-.1458	-.0515	-.0382	-.0278
60.000			.2631	-.2667	-.5811	-.2600	-.0006	.1338	.1333	-.4960	-.5695	-.3081	-.0449	-.0168	-.0098
90.000		.7349	.2837	-.2348	-.5321	-.2739	.1039	.2989	.4456		-.6073	-.2929	-.0195	-.0805	-.0518
120.000			.3304	-.1870	-.5150	-.2881	.0239	.1980	.2997	-.1671	-.1773	-.1870	-.1620	-.1084	-.0143
135.000								.1380		.0821		-.2535		-.1633	
150.000			.3918	-.1281	-.4782	-.3945	-.0530	.1069	.2040	.2156	-.2407	-.4915	-.3662	-.2229	-.0655
165.000				-.0809	-.4364	-.4038	-.0763	.0725	.1805	.2878	.1445	-.3462	-.2340	-.1951	-.0477
180.000	1.0830	.9345	.4835	-.0518	-.4063	-.3603	-.0674	.0724	.1715	.2888	.2615	-.3547	-.2691	-.2272	-.0427
270.000		.9473							.4050						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0182	-.0394	-.2881
30.000	-.0099	-.0283	-.2811
60.000	.0126	.0099	-.1336
90.000	.0062	.0193	
120.000	.0478	-.0176	.2355
135.000	.0486	.0909	.0421
150.000	-.0124	-.0117	-.0360
165.000	.0534	.0886	.1405
180.000	.0564	.0879	.1213

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(5) = -2.870 BETAO (9) = 6.060

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0560	.7308	.2997	-.2204	-.5559	-.6097	-.1289	-.0296	-.0348	-.1874	-.2619	-.1255	-.0675	-.0472	-.0434
30.000			.2384	-.2828	-.5943	-.6028	-.0621	.0438	.0481	-.1829	-.2989	-.1247	-.0545	-.0506	-.0375
60.000			.2152	-.3089	-.6080	-.2115	.0031	.1357	.1468	-.4995	-.5437	-.2647	-.0570	-.0291	-.0194
90.000		.6766	.2285	-.2851	-.5476	-.1287	.1017	.2962	.4515		-.6164	-.0479	-.0096	-.1127	-.1235
120.000			.2718	-.2330	-.5500	-.1874	.0207	.1934	.2872	-.1532	-.1998	-.1834	-.1524	-.1210	-.0442
135.000								.1305		.0777		-.2759		-.1793	
150.000			.3461	-.1703	-.5057	-.3781	-.0636	.0959	.1993	.1966	-.3248	-.5029	-.3304	-.2406	-.1022
165.000				-.1128	-.4509	-.4080	-.0926	.0573	.1532	.2564	.1154	-.3479	-.2573	-.2184	-.0699
180.000	1.0560	.8863	.4645	-.0680	-.4059	-.3714	-.0812	.0548	.1464	.2712	.2468	-.3634	-.3202	-.2423	-.0776
270.000		.9934							.3952						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0336	-.0552	-.2997
30.000	-.0281	-.0353	-.2835
60.000	-.0014	-.0045	-.1297
90.000	-.0308	-.0124	
120.000	.0206	-.0154	.1796
135.000	.0263	.0268	.0205
150.000	-.0305	-.0246	-.0632
165.000	.0273	.0570	.1407
180.000	.0211	.0652	.1384

ALPHAO(5) = -2.870 BETAO (10) = 8.070

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0250	.6977	.2771	-.2383	-.5697	-.6140	-.1504	-.0537	-.0559	-.2061	-.2741	-.1342	-.0855	-.0790	-.0721
30.000			.2013	-.3099	-.6189	-.6595	-.0594	.0441	.0528	-.1675	-.3180	-.1235	-.0631	-.0593	-.0528
60.000			.1762	-.3379	-.6213	-.1908	.0083	.1385	.1585	-.4481	-.5435	-.2537	-.0728	-.0514	-.0287
90.000		.6236	.1797	-.3260	-.6213	-.1071	.0950	.2800	.4625		-.6018	-.0753	-.0263	-.1342	-.1523
120.000			.2247	-.2861	-.5836	-.1901	.0236	.1866	.2839	-.1306	-.2345	-.1998	-.1641	-.1498	-.0838
135.000								.1246		.0770		-.3083		-.2064	
150.000			.3047	-.2113	-.5396	-.4527	-.0713	.0841	.1959	.1823	-.3681	-.5550	-.3345	-.2719	-.1280
165.000				-.1335	-.4691	-.4769	-.1075	.0335	.1476	.2358	.0857	-.3507	-.2864	-.2499	-.1022
180.000	1.0250	.8141	.4528	-.0721	-.4069	-.4204	-.0966	.0305	.1261	.2563	.2297	-.3462	-.3674	-.2744	-.1168
270.000		1.0300							.3897						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(5) = -2.870 BETAO (10) = 9.070

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0590	-.0745	-.3143
30.000	-.0327	-.0419	-.2852
60.000	-.0162	-.0193	-.1327
90.000	-.0719	-.0456	
120.000	-.0006	-.0240	.1669
135.000	.0085	.0210	.0369
150.000	-.0496	-.0396	-.0959
165.000	.0024	.0326	.1268
180.000	-.0178	.0294	.1392

ALPHAO(5) = -2.830 BETAO (11) = 10.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9885	.6377	.2495	-.2565	-.5794	-.6283	-.1941	-.0851	-.0926	-.2004	-.2854	-.1547	-.1163	-.1094	-.1011
30.000			.1605	-.3492	-.6367	-.6224	-.0858	.0315	.0407	-.1617	-.3454	-.1258	-.0749	-.0669	-.0636
60.000			.1279	-.3576	-.6453	-.1709	.0253	.1463	.1511	-.4462	-.5409	-.2204	-.0864	-.0724	-.0461
90.000		.5697	.1248	-.3646	-.6149	-.1000	.0805	.2511	.4733		-.5743	-.0246	-.0496	-.1572	-.1793
120.000			.1719	-.3286	-.6163	-.1672	.0221	.1716	.2694	-.1233	-.2672	-.2211	-.2000	-.1836	-.1175
135.000								.1130		.0632		-.3533		-.2288	
150.000			.2531	-.2513	-.5644	-.4587	-.0829	.0627	.1860	.1544	-.3539	-.5994	-.3656	-.2877	-.1494
165.000				-.1602	-.4848	-.4989	-.1272	.0011	.1218	.1950	.0529	-.3523	-.3376	-.2978	-.1456
180.000	.9885	.7826	.4364	-.0847	-.4135	-.4346	-.1141	.0076	.0941	.2210	.2014	-.5445	-.4722	-.3274	-.1789
270.000		1.0670							.3867						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0837	-.1086	-.3391
30.000	-.0395	-.0574	-.3002
60.000	-.0348	-.0409	-.1469
90.000	-.1195	-.0829	
120.000	-.0162	-.0385	.1496
135.000	-.0120	.0087	-.0067
150.000	-.0540	-.0547	-.1226
165.000	-.0285	.0104	.1117
180.000	-.0602	.0000	.1161

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(6) = -.690 BETAO (1) = -10.000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9936	.7122	.3134	-.1959	-.5404	-.5718	-.2184	-.0817	-.0825	-.1857	-.2600	-.1577	-.1251	-.1161	-.1049
30.000			.4725	-.0399	-.3901	-.4140	-.2514	-.0785	-.0958	-.3968	-.2491	-.1525	-.1052	-.0842	-.0689
60.000			.6145	.0949	-.2420	-.2194	-.0673	.0767	.0575	-.6611	-.4487	-.0959	.0288	.0037	.0033
90.000		1.0780	.6846	.1645	-.1581	-.1123	.0964	.2840	.4117		-.5805	-.4154	-.1330	-.0644	-.0236
120.000			.6455	.1330	-.1967	-.1717	-.0018	.1512	.1717	-.4269	-.0747	.0936	.0187	-.0048	.0635
135.000								.0787		.0451		.0359		-.0283	
150.000			.5481	.0321	-.2995	-.2888	-.1394	.0383	.0764	.2596	.2160	-.0810	-.2177	-.1426	-.0224
165.000				-.0633	-.3955	-.4062	-.1426	-.0056	.0877	.2861	.2787	-.0939	-.2296	-.1847	-.0182
180.000	.9936	.8479	.3750	-.1368	-.4579	-.4646	-.1324	-.0044	.1165	.2780	.2460	-.5883	-.2884	-.2230	-.0756
270.000		.5650							.4993						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0838	-.1076	-.3340
30.000	-.0570	-.0588	-.2969
60.000	.0219	.0468	-.1326
90.000	.0012	-.1243	
120.000	.1746	.0501	.6900
135.000	.1835	.1774	.3933
150.000	.1310	.2197	.4468
165.000	.1333	.2204	.5366
180.000	.0914	.1677	.3369

ALPHAO(6) = -.680 BETAO (2) = -7.980

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0460	.7654	.3462	-.1746	-.5261	-.5729	-.1583	-.0442	-.0433	-.1720	-.2464	-.1282	-.0914	-.0817	-.0715
30.000			.4646	-.0562	-.4190	-.4297	-.1927	-.0403	-.0532	-.3535	-.2404	-.1342	-.0956	-.0747	-.0454
60.000			.5741	.0467	-.2901	-.2477	-.0638	.0907	.0787	-.6336	-.4570	-.1282	.0382	.0030	.0007
90.000		1.0430	.6278	.1023	-.2295	-.1490	.0863	.2821	.4175		-.6078	-.3244	-.1158	-.0713	-.0191
120.000			.6030	.0802	-.2613	-.2027	.0017	.1546	.1854	-.4158	-.1310	.0524	-.0174	-.0338	.0414
135.000								.0930		.0263		-.0173		-.0626	
150.000			.5344	.0126	-.3429	-.3080	-.0860	.0609	.1016	.2507	.2149	-.0968	-.2217	-.1564	-.0167
165.000				-.0673	-.4161	-.4114	-.1137	.0257	.1149	.2904	.2769	-.1446	-.2016	-.1695	-.0002
180.000	1.0460	.8648	.3977	-.1231	-.4606	-.4710	-.1100	.0237	.1408	.2880	.2602	-.2442	-.2859	-.2055	-.0349
270.000		.6340							.4896						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 C1+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(6) = -.680 BETAO (2) = -7.980

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0540	-.0664	-.2948
30.000	-.0275	-.0262	-.2603
60.000	.0229	.0440	-.1246
90.000	.0141	-.0664	
120.000	.1554	.0339	.6638
135.000	.1655	.1663	.3922
150.000	.1218	.2098	.4162
165.000	.1359	.2117	.5216
180.000	.1001	.1685	.3305

ALPHAO(6) = -.670 BETAO (3) = -5.980

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0750	.8002	.3641	-.1649	-.5176	-.5326	-.0962	-.0222	-.0201	-.1657	-.2245	-.1110	-.0685	-.0543	-.0459
30.000			.4531	-.0773	-.4429	-.4505	-.1519	-.0135	-.0231	-.3102	-.2382	-.1230	-.0774	-.0659	-.0358
60.000			.5298	.0031	-.3540	-.2648	-.0566	.1017	.0941	-.6127	-.4715	-.1430	.0351	.0059	-.0044
90.000		.9967	.5698	.0397	-.3026	-.1770	.0769	.2798	.4181		-.6463	-.2666	-.0919	-.0526	-.0091
120.000			.5502	.0276	-.3269	-.2188	-.0011	.1560	.1925	-.4005	-.1572	.0167	-.0523	-.0676	.0269
135.000								.0988		.0219		-.0397		-.0885	
150.000			.5025	-.0234	-.3852	-.3031	-.0765	.0723	.1181	.2395	.1073	-.0727	-.2153	-.1737	-.0191
165.000				-.0788	-.4257	-.3763	-.0976	.0443	.1290	.2879	.2612	-.1773	-.2173	-.1841	.0029
180.000	1.0750	.8667	.4073	-.1181	-.4652	-.4166	-.0844	.0493	.1495	.2847	.2622	-.3033	-.2628	-.1990	-.0152
270.000		.6907							.4703						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0278	-.0454	-.2708
30.000	-.0117	-.0147	-.2508
60.000	.0202	.0409	-.1208
90.000	.0316	-.0142	
120.000	.1348	.0426	.5817
135.000	.1449	.1549	.3609
150.000	.1083	.1916	.3535
165.000	.1257	.1979	.4832
180.000	.1043	.1625	.3108

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(6) = -.660 BETAO (4) = -3.970

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0950	.8172	.3833	-.1524	-.5011	-.5518	-.0774	.0019	.0027	-.1491	-.2118	-.0958	-.0491	-.0373	-.0215
30.000			.4364	-.0970	-.4622	-.5127	-.1151	.0159	.0051	-.2533	-.2230	-.1219	-.0662	-.0522	-.0245
60.000			.4878	-.0427	-.4053	-.2608	-.0432	.1173	.1124	-.5791	-.4775	-.1719	.0213	.0115	.0073
90.000		.9519	.5152	-.0147	-.3686	-.1972	.0751	.2324	.4276		-.6672	-.2032	-.0334	-.0439	-.0110
120.000			.5093	-.0152	-.3772	-.2285	.0036	.1625	.2074	-.3664	-.1740	-.0228	-.0741	-.0955	.0125
135.000								.1112		.0278		-.0532		-.1230	
150.000			.4798	-.0447	-.3992	-.3312	-.0623	.0873	.1414	.2323	.0099	-.0589	-.2367	-.1940	-.0346
165.000				-.0818	-.4300	-.4401	-.0766	.0624	.1448	.2886	.2397	-.1970	-.2223	-.1839	-.0008
180.000	1.0950	.8759	.4158	-.1116	-.4591	-.4259	-.0642	.0690	.1611	.2844	.2623	-.3338	-.2233	-.1980	-.0252
270.000		.7450							.4612						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0114	-.0254	-.2491
30.000	.0004	.0022	-.2287
60.000	.0239	.0471	-.1203
90.000	.0457	.0657	
120.000	.1211	.0420	.5158
135.000	.1284	.1427	.3296
150.000	.0995	.1748	.3071
165.000	.1237	.1870	.4244
180.000	.1066	.1584	.2910

ALPHAO(6) = -.660 BETAO (5) = -1.980

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1080	.8302	.3878	-.1466	-.4897	-.5522	-.0977	.0067	.0118	-.1404	-.1699	-.0934	-.0427	-.0260	-.0112
30.000			.4147	-.1190	-.4630	-.5059	-.0840	.0269	.0259	-.2315	-.2056	-.1181	-.0576	-.0419	-.0196
60.000			.4430	-.0863	-.4360	-.2550	-.0306	.1235	.1264	-.5558	-.4943	-.1780	.0251	.0041	.0039
90.000		.9061	.4599	-.0714	-.4101	-.1867	.0753	.2833	.4329		-.6820	.0242	.0117	-.0705	-.0385
120.000			.4601	-.0664	-.4076	-.2143	.0084	.1697	.2203	-.3379	-.1816	-.0183	-.0881	-.1078	.0058
135.000								.1227		.0273		-.0625		-.1284	
150.000			.4537	-.0759	-.4223	-.3555	-.0536	.0980	.1576	.2227	-.0885	-.0977	-.2453	-.1996	-.0394
165.000				-.0888	-.4414	-.3660	-.0673	.0731	.1579	.2907	.2074	-.2509	-.2264	-.1827	.0008
180.000	1.1080	.8780	.4224	-.1118	-.4502	-.4099	-.0554	.0787	.1670	.2880	.2597	-.3494	-.1974	-.1569	-.0189
270.000		.7997							.4499						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(8) = -.660 BETAO (5) = -1.980

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0014	-.0111	-.2466
30.000	.0058	.0065	-.2155
60.000	.0257	.0451	-.1183
90.000	.0445	.0829	
120.000	.0988	.0374	.4505
135.000	.1054	.1141	.2500
150.000	.0654	.1334	.2190
165.000	.1025	.1599	.3787
180.000	.0881	.1359	.2777

ALPHAO(6) = -.660 BETAO (6) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

Y/LT	.0000	.0380	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1080	.8318	.3874	-.1463	-.4978	-.5540	-.0897	.0119	.0127	-.1420	-.1795	-.0927	-.0378	-.0234	-.0087
30.000			.3951	-.1446	-.4952	-.5528	-.0853	.0383	.0419	-.2089	-.1974	-.1176	-.0591	-.0400	-.0190
60.000			.3960	-.1354	-.4859	-.3100	-.0173	.1350	.1395	-.5339	-.5240	-.2049	-.0017	-.0035	.0068
90.000		.8524	.4032	-.1265	-.4587	-.1923	.0822	.2912	.4414		-.7019	-.0058	-.0015	-.1020	-.0563
120.000			.4101	-.1139	-.4575	-.2497	.0173	.1769	.2352	-.3082	-.1320	-.0525	-.1010	-.1181	-.0064
135.000								.1262		.0317		-.1074		-.1466	
150.000			.4214	-.1067	-.4477	-.3905	-.0459	.1002	.1695	.2180	-.1100	-.2273	-.2610	-.2356	-.0685
165.000				-.1065	-.4379	-.3749	-.0613	.0767	.1641	.2816	.1724	-.2987	-.2343	-.1969	-.0170
180.000	1.1080	.8737	.4282	-.1099	-.4404	-.3889	-.0499	.0725	.1644	.2765	.2604	-.3336	-.1840	-.1669	-.0056
270.000		.8539							.4401						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0017	-.0143	-.2553
30.000	.0018	-.0002	-.2254
60.000	.0195	.0357	-.1145
90.000	.0321	.0669	
120.000	.0795	.0283	.3594
135.000	.0867	.0686	.1476
150.000	.0424	.0797	.1416
165.000	.0795	.0958	.1339
180.000	.0874	.1022	.0792

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(6) = -.670 BETAO (7) = 2.050

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.1040	.8277	.3826	-.1519	-.4946	-.5383	-.0626	.0051	.0092	-.1475	-.1763	-.0944	-.0430	-.0254	-.0164
30.000			.3602	-.1730	-.5218	-.5716	-.0751	.0432	.0519	-.1918	-.2130	-.1082	-.0612	-.0415	-.0196
60.000			.3441	-.1815	-.5326	-.2763	-.0072	.1413	.1518	-.5129	-.5209	-.1915	-.0146	-.0148	.0012
90.000		.8030	.3470	-.1807	-.5091	-.2197	.0899	.2969	.4512		-.6857	.0995	-.0136	-.1171	-.0771
120.000			.3608	-.1666	-.4922	-.2873	.0212	.1836	.2513	-.2758	-.1806	-.0827	-.1166	-.1235	-.0165
135.000								.1290		.0393		-.1461		-.1449	
150.000			.3879	-.1365	-.4740	-.3261	-.0467	.1038	.1792	.2019	-.1502	-.3310	-.2893	-.2371	-.0477
165.000				-.1190	-.4584	-.3412	-.0671	.0744	.1669	.2745	.1507	-.2841	-.2007	-.1621	-.0193
180.000	1.1040	.8747	.4257	-.1097	-.4464	-.3912	-.0611	.0682	.1565	.2753	.2585	-.3542	-.1915	-.1809	-.0205
270.000		.9033							.4293						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0027	-.0140	-.2495
30.000	.0025	-.0044	-.2418
60.000	.0195	.0291	-.1101
90.000	.0195	.0516	
120.000	.0623	.0217	.2994
135.000	.0714	.0531	.0899
150.000	.0561	.0598	.0034
165.000	.0744	.0939	.1692
180.000	.0806	.1090	.1043

ALPHAO(6) = -.680 BETAO (8) = 4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.0950	.8115	.3729	-.1571	-.5078	-.5669	-.0936	-.0020	.0015	-.1556	-.2165	-.1040	-.0547	-.0378	-.0279
30.000			.3224	-.2030	-.5501	-.5933	-.0669	.0505	.0624	-.1743	-.2576	-.1015	-.0579	-.0517	-.0306
60.000			.2924	-.2312	-.5614	-.2911	.0059	.1499	.1669	-.4849	-.5064	-.2050	-.0316	-.0294	-.0119
90.000		.7470	.2891	-.2347	-.5415	-.2859	.1070	.3083	.4628		-.6722	.0795	-.0360	-.1431	-.0975
120.000			.3135	-.2131	-.5371	-.2093	.0261	.1883	.2644	-.2428	-.1816	-.1107	-.1319	-.1319	-.0245
135.000								.1340		.0475		-.1821		-.1671	
150.000			.3586	-.1759	-.5112	-.3444	-.0420	.1042	.1875	.1919	-.2484	-.4297	-.3097	-.2400	-.0546
165.000				-.1348	-.4809	-.4335	-.0689	.0601	.1648	.2691	.1277	-.3011	-.1959	-.1758	-.0407
180.000	1.0950	.8832	.4234	-.1109	-.4601	-.4528	-.0692	.0629	.1471	.2705	.2496	-.3715	-.2345	-.2194	-.0370
270.000		.9570							.4236						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(6) = -.680 BETAO (6) = 4.050

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0082	-.0259	-.2447
30.000	-.0025	-.0111	-.2521
60.000	.0098	.0164	-.1087
90.000	.0014	.0339	
120.000	.0524	.0176	.2418
135.000	.0596	.0601	.0567
150.000	.0040	.0159	-.0175
165.000	.0698	.0924	.1545
180.000	.0708	.1119	.1372

ALPHAO(6) = -.690 BETAO (9) = 6.060

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.0680	.7904	.3580	-.1686	-.5207	-.5837	-.1351	-.0262	-.0234	-.1725	-.2389	-.1164	-.0715	-.0516	-.0450
30.000			.2839	-.2411	-.5689	-.6280	-.0610	.0474	.0640	-.1658	-.2796	-.1034	-.0622	-.0555	-.0423
60.000			.2454	-.2863	-.5890	-.2670	.0155	.1528	.1729	-.4600	-.4978	-.1942	-.0584	-.0387	-.0277
90.000		.6874	.2314	-.2846	-.5716	-.1944	.1107	.3135	.4705		-.6499	.0942	-.0697	-.1656	-.1283
120.000			.2565	-.2535	-.5655	-.1878	.0289	.1858	.2702	-.2214	-.1937	-.1276	-.1488	-.1365	-.0498
135.000								.1296		.0456		-.2234		-.1756	
150.000			.3044	-.2123	-.5410	-.3415	-.0475	.0972	.1887	.1773	-.3123	-.4731	-.3104	-.2482	-.0969
165.000				-.1610	-.5001	-.4547	-.0825	.0492	.1541	.2449	.1080	-.3162	-.2262	-.2104	-.0681
180.000	1.0680	.8561	.4030	-.1236	-.4661	-.4189	-.0877	.0383	.1243	.2505	.2380	-.3748	-.2929	-.2347	-.0765
270.000		1.0020							.4152						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0323	-.0466	-.2674
30.000	-.0177	-.0205	-.2544
60.000	-.0026	.0028	-.1138
90.000	-.0293	.0120	
120.000	.0367	.0214	.1998
135.000	.0441	.0536	.0447
150.000	-.0029	.0008	-.0350
165.000	.0457	.0789	.1623
180.000	.0432	.0866	.1625

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(6) = -.890 BETAO (10) = 8.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0360	.7541	.3366	-.1804	-.5291	-.5799	-.1676	-.0557	-.0503	-.1869	-.2509	-.1295	-.0951	-.0871	-.0758
30.000			.2423	-.2744	-.5925	-.6429	-.0628	.0347	.0590	-.1528	-.3137	-.1066	-.0660	-.0645	-.0524
60.000			.1952	-.3203	-.6250	-.2233	.0212	.1525	.1770	-.4413	-.4859	-.1805	-.0742	-.0568	-.0384
90.000		.6325	.1825	-.3218	-.5986	-.1468	.1939	.3116	.4808		-.6340	.0890	-.1038	-.1943	-.1782
120.000			.2094	-.3011	-.6018	-.1732	.0343	.1820	.2621	-.1989	-.2419	-.1588	-.1699	-.1620	-.0845
135.000								.1307		.0461		-.2607		-.1990	
150.000			.2715	-.2468	-.5675	-.3986	-.0530	.0913	.1897	.1663	-.3920	-.5178	-.3175	-.2632	-.1171
165.000				-.1851	-.5208	-.5203	-.0973	.0316	.1357	.2236	.0710	-.3261	-.2594	-.2446	-.0929
180.000	1.0360	.7553	.3938	-.1316	-.4687	-.4797	-.0983	.0207	.1079	.2377	.2121	-.3523	-.3317	-.2701	-.1107
270.000		1.0420							.4098						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0597	-.0719	-.2962
30.000	-.0271	-.0334	-.2575
60.000	-.0131	-.0149	-.1251
90.000	-.0770	-.0230	
120.000	.0196	.0111	.1854
135.000	.0243	.0437	.0319
150.000	-.0235	-.0121	-.0667
165.000	.0183	.0556	.1499
180.000	-.0005	.0549	.1571

ALPHAO(6) = -.890 BETAO (11) = 10.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9945	.7078	.3067	-.2037	-.5418	-.5772	-.2062	-.0876	-.0869	-.1832	-.2548	-.1608	-.1244	-.1160	-.1017
30.000			.1933	-.3181	-.6275	-.6303	-.0984	.0237	.0458	-.1448	-.2942	-.1174	-.0758	-.0748	-.0584
60.000			.1420	-.3573	-.6473	-.1908	.0346	.1697	.1748	-.4269	-.4610	-.1995	-.0795	-.0673	-.0477
90.000		.5712	.1312	-.3471	-.6277	-.0815	.0924	.2937	.4927		-.5842	.0755	-.1392	-.2255	-.2225
120.000			.1604	-.3466	-.6206	-.1469	.0355	.1750	.2452	-.1869	-.2603	-.1850	-.1941	-.1962	-.1115
135.000								.1261		.0369		-.2929		-.2176	
150.000			.2238	-.2867	-.5848	-.3414	-.0619	.0797	.1805	.1487	-.3755	-.5417	-.3410	-.2747	-.1341
165.000				-.2103	-.5246	-.5473	-.1159	.0080	.1110	.1933	.0317	-.3103	-.3101	-.2839	-.1224
180.000	.9945	.7201	.3794	-.1435	-.4624	-.4834	-.1124	-.0038	.0752	.2056	.1863	-.4458	-.4284	-.3143	-.1540
270.000		1.0740							.4029						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O6+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(6) = -.690 BETAO (11) = 10.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0866	-.1069	-.3297
30.000	-.0453	-.0570	-.2801
60.000	-.0295	-.0344	-.1363
90.000	-.1199	-.0538	
120.000	.0038	-.0059	.1620
135.000	.0075	.0313	.0094
150.000	-.0373	-.0284	-.1004
165.000	-.0121	.0347	.1333
180.000	-.0393	.0245	.1348

ALPHAO(7) = 2.060 BETAO (1) = -10.000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9958	.7786	.3892	-.1254	-.4819	-.5241	-.3233	-.0787	-.0684	-.1415	-.2173	-.1438	-.1124	-.1085	-.1009
30.000			.5489	.0315	-.3260	-.3502	-.2011	-.0334	-.0421	-.2866	-.1929	-.1141	-.0813	-.0756	-.0470
60.000			.6630	.1459	-.2011	-.1807	-.0240	.1316	.1311	-.5775	-.3439	-.0573	.0408	.0107	.0120
90.000		1.0750	.6817	.1617	-.1612	-.1193	.1076	.2837	.4083		-.5365	-.2721	-.1574	-.1106	-.0512
120.000			.5926	.0831	-.2464	-.2197	-.0401	.0918	.0905	-.4209	-.3135	.1237	.0573	.0110	.0677
135.000								.0238		.0245		.0366		-.0142	
150.000			.4725	-.0402	-.3693	-.3688	-.1612	-.0085	.0154	.2307	.1679	-.1114	-.1878	-.1337	-.0075
165.000				-.1390	-.4694	-.4741	-.1461	-.0310	.0491	.2574	.2490	-.0830	-.1913	-.1717	.0003
180.000	.9958	.7794	.3071	-.2063	-.5247	-.5319	-.1273	-.0098	.1004	.2579	.2327	-.3720	-.2658	-.2109	-.0578
270.000		.5639							.5027						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0871	-.1021	-.3281
30.000	-.0330	-.0339	-.2798
60.000	.0336	.0589	-.1321
90.000	-.0103	-.1006	
120.000	.1955	.1271	.6818
135.000	.2054	.2184	.4048
150.000	.1680	.2459	.4588
165.000	.1613	.2425	.5558
180.000	.1177	.1895	.3491

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(7) = 1.980 BETAO (2) = -5.980

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0680	.8596	.4373	-.0967	-.4634	-.4874	-.1605	-.0146	-.0028	-.1212	-.1970	-.1041	-.0597	-.0471	-.0398
30.000			.5268	-.0062	-.3827	-.3808	-.1414	.0188	.0175	-.2405	-.2114	-.1065	-.0439	-.0370	-.0215
60.000			.5787	.0487	-.3179	-.2340	-.0267	.1420	.1552	-.5221	-.4152	-.1380	.0285	.0272	.0227
90.000		.9946	.5710	.0438	-.3118	-.1858	.0736	.2747	.4151		-.6039	-.0876	-.0118	-.0289	-.0967
120.000			.5052	-.0151	-.3704	-.2644	-.0284	.1124	.1211	-.3217	-.3503	.0088	.0139	-.0393	.0330
135.000								.0590		.0258		-.0801		-.0629	
150.000			.4343	-.0912	-.4450	-.3570	-.0853	.0375	.0723	.2261	.1145	-.1277	-.1784	-.1540	-.0088
165.000				-.1494	-.4892	-.4621	-.1042	.0212	.1014	.2653	.2421	-.1566	-.1587	-.1741	.0172
180.000	1.0680	.8001	.3336	-.1901	-.5137	-.4366	-.0898	.0392	.1362	.2650	.2450	-.3122	-.2338	-.1806	-.0051
270.000		.6813							.4725						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0216	-.0341	-.2423
30.000	.0080	.0031	-.2273
60.000	.0436	.0655	-.1055
90.000	.0631	.0519	
120.000	.1531	.1123	.5759
135.000	.1632	.1879	.3584
150.000	.1336	.2126	.3547
165.000	.1468	.2200	.4916
180.000	.1235	.1830	.3207

ALPHAO(7) = 1.970 BETAO (3) = -3.980

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0940	.8840	.4525	-.0830	-.4520	-.4997	-.1026	-.0027	.0186	-.1159	-.1719	-.0957	-.0483	-.0243	-.0203
30.000			.5002	-.0332	-.4092	-.4303	-.0911	.0316	.0411	-.2118	-.1993	-.1062	-.0325	-.0305	-.0200
60.000			.5255	-.0037	-.3764	-.2396	-.0255	.1420	.1734	-.5046	-.4267	-.1649	.0156	.0169	.0090
90.000		.9496	.5220	-.0158	-.3801	-.1798	.0673	.2710	.4253		-.6351	-.0982	.0226	-.0520	-.0312
120.000			.4681	-.0568	-.4217	-.2715	-.0183	.1295	.1438	-.3416	-.3564	-.0476	-.0100	-.0607	.0213
135.000								.0821		.0193		-.1102		-.0860	
150.000			.4156	-.1143	-.4739	-.4252	-.0799	.0616	.0983	.2159	.0261	-.1107	-.1736	-.1714	-.0162
165.000				-.1569	-.5013	-.5213	-.0854	.0497	.1211	.2748	.2211	-.2075	-.1818	-.1739	.0137
180.000	1.0940	.8056	.3432	-.1855	-.5193	-.4536	-.0672	.0692	.1463	.2674	.2445	-.3479	-.1926	-.1761	-.0169
270.000		.7437							.4591						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+712+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHA0(7) = 1.970 BETA0 (3) = -3.900

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0046	-.0137	-.2200
30.000	.0090	.0099	-.1983
60.000	.0428	.0629	-.0920
90.000	.0662	.0952	
120.000	.1358	.1186	.5026
135.000	.1467	.1716	.3256
150.000	.1216	.1938	.2978
165.000	.1430	.2139	.4457
180.000	.1261	.1827	.3060

ALPHA0(7) = 1.980 BETA0 (4) = -1.990

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1070	.8949	.4593	-.0743	-.4471	-.5163	-.1009	.0132	.0703	-.1108	-.1610	-.1001	-.0366	-.0151	-.0070
30.000			.4782	-.0538	-.4339	-.4921	-.0906	.0440	.0616	-.1875	-.1856	-.1046	-.0370	-.0279	-.0051
60.000			.4792	-.0506	-.4251	-.3397	-.0161	.1525	.1826	-.4730	-.4027	-.1875	-.0015	.0051	.0092
90.000		.8988	.4560	-.0726	-.4319	-.1743	.0739	.2773	.4300		-.6519	-.1016	.0041	-.0830	-.0545
120.000			.4184	-.1067	-.4535	-.3047	-.0026	.1399	.1631	-.3151	-.3410	-.0675	-.0392	-.0872	.0068
135.000								.0963		.0248		-.1203		-.1147	
150.000			.3868	-.1373	-.4735	-.4187	-.0537	.0766	.1206	.2111	-.0808	-.1614	-. 324	-.1894	-.0259
165.000				-.1634	-.4877	-.4544	-.0650	.0616	.1371	.2717	.1901	-.2653	-.1832	-.1671	.0078
180.000	1.1070	.8082	.3505	-.1806	-.5093	-.4382	-.0512	.0714	.1490	.2667	.2465	-.3657	-.1615	-.1448	-.0067
270.000		.8036							.4494						

X/LT	.7460	.8530	.9280
PHI			
.000	.0108	-.0003	-.2185
30.000	.0182	.0175	-.1957
60.000	.0386	.0576	-.0733
90.000	.0549	.1058	
120.000	.1148	.1016	.4340
135.000	.1232	.1474	.2596
150.000	.0893	.1600	.2319
165.000	.1241	.1812	.3961
180.000	.1053	.1567	.2783

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHA0(7) = 1.980 BETA0 (5) = .060

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1070	.9007	.4611	-.0737	-.4350	-.5055	-.0900	.0193	.0331	-.1078	-.1460	-.0905	-.0341	-.0133	.0029
30.000			.4530	-.0834	-.4458	-.5075	-.0802	.0504	.0707	-.1602	-.1799	-.1036	-.0356	-.0267	-.0109
60.000			.4267	-.1020	-.4580	-.3796	-.0089	.1581	.1942	-.4442	-.4061	-.1969	-.0116	-.0032	.0019
90.000		.8486	.4003	-.1282	-.4712	-.1613	.0773	.2834	.4402		-.6846	-.1039	-.0175	-.1003	-.0715
120.000			.3750	-.1528	-.4877	-.2943	.0134	.1542	.1840	-.2804	-.3307	-.0971	-.0484	-.0832	.0037
135.000								.1127		.0276		-.1525		-.1120	
150.000			.3622	-.1671	-.5019	-.4286	-.0442	.0904	.1455	.2097	-.1557	-.2540	-.2041	-.1905	-.0452
165.000				-.1667	-.5104	-.4017	-.0568	.0704	.1485	.2714	.1574	-.2989	-.1902	-.1604	-.0013
180.000	1.1070	.8043	.3592	-.1777	-.5207	-.4227	-.0467	.0667	.1453	.2664	.2469	-.3593	-.1512	-.1091	.0118
270.000		.8535							.4404						
X/LT	.7480	.8530	.9280												
PHI															
.000	.0145	.0038	-.2168												
30.000	.0125	.0176	-.2026												
60.000	.0291	.0498	-.0709												
90.000	.0352	.0994													
120.000	.0974	.0778	.3786												
135.000	.1056	.0956	.1584												
150.000	.0731	.1057	.1537												
165.000	.1045	.1233	.1352												
180.000	.1070	.1305	.0892												

ALPHA0(7) = 1.970 BETA0 (6) = 2.040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1040	.8942	.4590	-.0844	-.4489	-.5038	-.0596	.0157	.0287	-.1106	-.1561	-.0932	-.0354	-.0174	-.0050
30.000			.4159	-.1200	-.4746	-.5430	-.0672	.0535	.0773	-.1459	-.1951	-.1159	-.0396	-.0292	-.0142
60.000			.3783	-.1524	-.4964	-.3896	.0021	.1620	.2026	-.4228	-.4221	-.1912	-.0265	-.0122	-.0028
90.000		.7994	.3475	-.1806	-.5179	-.1633	.0865	.2894	.4536		-.7157	-.1189	-.0332	-.1394	-.0873
120.000			.3269	-.1952	-.5314	-.3989	.0337	.1691	.2080	-.2727	-.3327	-.1067	-.0705	-.1009	-.0033
135.000								.1234		.0353		-.1984		-.1233	
150.000			.3348	-.1949	-.5321	-.4574	-.0349	.1000	.1610	.2053	-.1628	-.3290	-.2474	-.2055	-.0334
165.000				-.1818	-.5225	-.5016	-.0567	.0731	.1536	.2362	.1446	-.2974	-.1706	-.1330	.0001
180.000	1.1040	.8097	.3581	-.1747	-.5039	-.5173	-.0609	.0623	.1435	.2606	.2490	-.3831	-.1607	-.1506	-.0033
270.000		.9048							.4318						
X/LT	.7480	.8530	.9280												
PHI															

ARC11-716 IA14 OI+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAD(7) = 1.970 BETAD (6) = 2.040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0058	.0019	-.2126
30.000	.0083	.0152	-.2077
60.000	.0236	.0421	-.0878
90.000	.0211	.0767	
120.000	.0847	.0645	.3352
135.000	.0919	.0926	.1043
150.000	.0829	.0925	.0268
165.000	.0999	.1250	.1857
180.000	.1026	.1389	.1175

ALPHAD(7) = 2.050 BETAD (7) = 4.050

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.0630	.8753	.4422	-.0907	-.4564	-.5149	-.0744	.0017	.0142	-.1206	-.1746	-.1019	-.0467	-.0279	-.0180
30.000			.3757	-.1535	-.5061	-.5669	-.0729	.0512	.0765	-.1355	-.2178	-.1139	-.0430	-.0326	-.0269
60.000			.3240	-.2046	-.5367	-.3763	.0141	.1712	.2057	-.4016	-.4296	-.1665	-.0346	-.0254	-.0104
90.000		.7421	.2897	-.2357	-.5620	-.1561	.0932	.2967	.4635		-.7340	-.1341	-.0882	-.1749	-.1108
120.000			.2835	-.2557	-.5470	-.3584	.0398	.1755	.2250	-.2580	-.3347	-.1326	-.0920	-.1130	-.0130
135.000								.1235		.0444		-.2167		-.1359	
150.000			.3011	-.2247	-.5495	-.3287	-.0343	.0995	.1675	.1828	-.2153	-.4019	-.2739	-.2089	-.0430
165.000				-.1992	-.5311	-.4825	-.0623	.0627	.1493	.2536	.1213	-.3153	-.1702	-.1505	-.0257
180.000	1.0930	.8116	.3499	-.1813	-.5130	-.4960	-.0710	.0508	.1298	.2518	.2417	-.3956	-.1954	-.1925	-.0225
270.000		.9549							.4236						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0034	-.0096	-.2201
30.000	-.0037	.0015	-.2216
60.000	.0107	.0297	-.1040
90.000	.0159	.0631	
120.000	.0762	.0540	.2777
135.000	.0833	.0879	.0769
150.000	.0334	.0473	.0060
165.000	.0905	.1204	.1604
180.000	.0940	.1328	.1638

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (R91T31)

ALPHAO(7) = 2.050 BETAO (8) = 6.070

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0690	.8595	.4346	-.0991	-.4610	-.5163	-.1430	-.0191	-.0040	-.1288	-.2088	-.1131	-.0640	-.0472	-.0337
30.000			.3411	-.1850	-.5348	-.5885	-.0518	.0426	.0760	-.1258	-.2701	-.1134	-.0532	-.0467	-.0322
60.000			.2723	-.2576	-.5751	-.4645	.0162	.1735	.2184	-.3823	-.4244	-.1465	-.0477	-.0391	-.0145
90.000		.6869	.2353	-.2894	-.5873	-.1535	.0952	.3019	.4756		-.7588	-.1231	-.0915	-.1739	-.1157
120.000			.2333	-.2874	-.5819	-.2105	.0370	.1808	.2416	-.2393	-.3272	-.1418	-.1284	-.1293	-.0354
135.000								.1269		.0432		-.2322		-.1603	
150.000			.2643	-.2626	-.5697	-.2978	-.0319	.0983	.1726	.1718	-.2781	-.4695	-.2847	-.2337	-.0765
165.000				-.2226	-.5424	-.5163	-.0671	.0518	.1408	.2420	.1027	-.3005	-.2022	-.1905	-.0514
180.000	1.0690	.8008	.3328	-.1940	-.5209	-.5300	-.0804	.0308	.1080	.2349	.2238	-.3860	-.2573	-.2153	-.0644
270.000		.9950							.4175						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0226	-.0334	-.2399
30.000	-.0140	-.0106	-.2302
60.000	.0043	.0186	-.1178
90.000	.0018	.0549	
120.000	.0610	.0591	.2357
135.000	.0620	.0854	.0649
150.000	.0176	.0307	-.0138
165.000	.0636	.0991	.1847
180.000	.0601	.1067	.1813

ALPHAO(7) = 2.040 BETAO (9) = 8.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0370	.8218	.4116	-.1074	-.4706	-.5287	-.1916	-.0485	-.0326	-.1389	-.2270	-.1268	-.0881	-.0743	-.0666
30.000			.2907	-.2261	-.5667	-.6208	-.0846	.0299	.0654	-.1157	-.2859	-.1055	-.0654	-.0537	-.0487
60.000			.2123	-.3006	-.6048	-.4163	.0247	.1750	.2287	-.3654	-.4072	-.1368	-.0641	-.0451	-.0356
90.000		.6296	.1801	-.3245	-.6204	-.1262	.0930	.2939	.4897		-.8296	-.0940	-.0962	-.1757	-.1303
120.000			.1826	-.3243	-.6199	-.1618	.0338	.1740	.2563	-.2443	-.3550	-.1519	-.1617	-.1514	-.0648
135.000								.1255		.0284		-.2548		-.1863	
150.000			.2250	-.2912	-.5962	-.3140	-.0312	.0982	.1753	.1546	-.3724	-.4784	-.2882	-.2495	-.1114
165.000				-.2460	-.5708	-.5824	-.0779	.0403	.1292	.2092	.0697	-.3139	-.2397	-.2255	-.0821
180.000	1.0370	.7044	.3284	-.1996	-.5363	-.5592	-.0917	.0112	.0909	.2016	.1853	-.3636	-.2986	-.2634	-.1034
270.000		1.0410							.4135						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(7) = 2.040 BETAO (9) = 8.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0512	-.0632	-.2719
30.000	-.0294	-.0258	-.2356
60.000	-.0131	-.0028	-.1379
90.000	-.0191	.0335	
120.000	.0449	.0459	.2198
135.000	.0395	.0716	.0553
150.000	-.0060	.0121	-.0415
165.000	.0335	.0751	.1707
180.000	.0140	.0684	.1679

ALPHAO(7) = 2.020 BETAO (10) = 10.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9936	.7749	.3797	-.1362	-.4864	-.5261	-.2731	-.0875	-.0719	-.1528	-.2433	-.1526	-.1145	-.1135	-.1003
30.000			.2373	-.2730	-.6011	-.6500	-.1252	.0094	.0533	-.1144	-.3143	-.1103	-.0729	-.0766	-.0656
60.000			.1563	-.3479	-.6278	-.4673	.0483	.1885	.2383	-.3601	-.3698	-.1334	-.0806	-.0624	-.0474
90.000		.5657	.1262	-.3456	-.6376	-.1078	.0710	.2961	.4960		-.8621	-.0617	-.1073	-.1703	-.1266
120.000			.1314	-.3561	-.6415	-.1456	.0269	.1644	.2430	-.2419	-.3270	-.1878	-.2096	-.1949	-.0852
135.000								.1151		.0036		-.2770		-.2105	
150.000			.1762	-.3308	-.6212	-.2482	-.0370	.0889	.1657	.1290	-.4087	-.5008	-.3310	-.2714	-.1386
165.000				-.2739	-.5872	-.5658	-.0961	.0125	.1004	.1732	.0192	-.3171	-.2929	-.2781	-.1165
180.000	.9936	.6398	.3062	-.2194	-.5319	-.5543	-.1068	-.0148	.0526	.1552	.1523	-.3799	-.4014	-.3121	-.1620
270.000		1.0760							.4073						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0914	-.1044	-.3236
30.000	-.0479	-.0569	-.2738
60.000	-.0346	-.0331	-.1642
90.000	-.0474	.0068	
120.000	.0232	.0238	.2154
135.000	.0245	.0580	.0464
150.000	-.0195	-.0024	-.0778
165.000	.0008	.0499	.1568
180.000	-.0301	.0313	.1432

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(8) = 4.110 BETAO (1) = -10.000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9873	.8214	.4391	-.0784	-.4377	-.4800	-.3675	-.0762	-.0576	-.1179	-.1939	-.1217	-.0961	-.0910	-.0871
30.000			.5994	.0776	-.2792	-.3092	-.1636	-.0058	-.0043	-.1958	-.1743	-.0847	-.0403	-.0470	-.0322
60.000			.6900	.1745	-.1698	-.1563	-.0016	.1597	.1743	-.5142	-.3222	-.0663	.0601	.0392	.0436
90.000		1.0610	.6697	.1571	-.1676	-.1241	.0825	.2653	.3863		-.4912	-.1150	.0331	-.0288	-.0080
120.000			.5461	.0335	-.2790	-.2577	-.0674	.0464	.0289	-.1221	-.4178	.0277	.1100	.0419	.0749
135.000								-.0248		.0448		-.0306		.0156	
150.000			.4090	-.1026	-.4152	-.4117	-.1751	-.0460	-.0199	.2131	.1047	-.1500	-.1466	-.1180	-.0075
165.000				-.1980	-.5252	-.5005	-.1398	-.0529	.0352	.2398	.2120	-.0919	-.1402	-.1509	.0038
180.000	.9873	.7219	.2483	-.2624	-.5669	-.4973	-.1043	-.0216	.0922	.2445	.2120	-.3562	-.2378	-.2028	-.0548
270.000		.5518							.4806						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0770	-.0979	-.3113
30.000	-.0104	-.0184	-.2625
60.000	.0643	.0826	-.1148
90.000	.0638	.0097	
120.000	.1980	1940	.6320
135.000	.2098	.2295	.3794
150.000	.1542	.2383	.4362
165.000	.1662	.2432	.5347
180.000	.1185	.1880	.3328

ALPHAO(8) = 4.130 BETAO (2) = -7.960

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0300	.8688	.4662	-.0554	-.4266	-.4657	-.3596	-.0392	-.0185	-.1009	-.1655	-.0952	-.0677	-.0605	-.0541
30.000			.5856	.0621	-.3021	-.3260	-.1429	.0159	.0245	-.1943	-.1519	-.0742	-.0315	-.0306	-.0213
60.000			.6454	.1229	-.2267	-.1904	-.0084	.1599	.1871	-.4909	-.3196	-.0781	.0493	.0388	.0325
90.000		1.0190	.6114	.0953	-.2323	-.1526	.0676	.2612	.3880		-.5200	-.1428	.0064	-.0413	-.0055
120.000			.5041	-.0116	-.3381	-.2763	-.0699	.0552	.0425	-.1449	-.4228	-.0333	.0783	.0181	.0545
135.000								.0034		.0449		-.1051		-.0128	
150.000			.3951	-.1213	-.4521	-.4085	-.1216	-.0160	.0147	.2156	.0937	-.1656	-.1367	-.1276	-.0003
165.000				-.1951	-.5375	-.4657	-.0864	-.0133	.0611	.2423	.2169	-.1369	-.1230	-.1532	.0240
180.000	1.0300	.7392	.2686	-.2523	-.5631	-.4092	-.0997	.0137	.1117	.2516	.2340	-.2984	-.2351	-.1752	-.0172
270.000		.6171							.4650						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(8) = 4.130 BETAO (2) = -7.960

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0422	-.0577	-.2603
30.000	.0049	.0068	-.2297
60.000	.0581	.0835	-.1010
90.000	.0665	.0801	
120.000	.1796	.1739	.6062
135.000	.1921	.2130	.3635
150.000	.1451	.2243	.4026
165.000	.1609	.2307	.5047
180.000	.1250	.1881	.3232

ALPHAO(8) = 4.158 BETAO (3) = -5.960

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0089	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0620	.9000	.4925	-.0400	-.4240	-.4531	-.2325	-.0154	.0093	-.0954	-.1499	-.0757	-.0460	-.0412	-.0280
30.000			.5750	.0413	-.3403	-.3451	-.1343	.0391	.0475	-.1815	-.1668	-.0698	-.0187	-.0184	-.0087
60.000			.6007	.0726	-.2892	-.2240	-.0142	.1613	.1988	-.4653	-.3221	-.0970	.0303	.0230	.0229
90.000		.9769	.5577	.0357	-.3092	-.1924	.0582	.2589	.3932		-.5563	-.1748	.0029	-.0503	-.0200
120.000			.4618	-.0577	-.4004	-.2950	-.0534	.0718	.0588	-.1494	-.4435	-.0782	.0372	-.0139	.0367
135.000								.0269		.0398		-.1458		-.0392	
150.000			.3759	-.1498	-.4880	-.4200	-.0983	.0120	.0399	.2148	.0841	-.1795	-.1345	-.1438	-.0020
165.000				-.2048	-.5425	-.4789	-.0803	.0115	.0848	.2486	.2180	-.1693	-.1395	-.1589	.0213
180.000	1.0620	.7448	.2778	-.2471	-.5564	-.3498	-.0845	.0446	.1240	.2537	.2302	-.3284	-.2093	-.1579	-.0013
270.000		.6736							.4486						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0145	-.0261	-.2276
30.000	.0142	.0198	-.2048
60.000	.0536	.0805	-.0866
90.000	.0740	.0921	
120.000	.1613	.1656	.5522
135.000	.1726	.2010	.3283
150.000	.1356	.2057	.3391
165.000	.1599	.2251	.4701
180.000	.1324	.1907	.3141

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(8) = 4.160 BETAO (4) = -3.960

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0840	.9303	.5043	-.0338	-.4134	-.4688	-.1277	.0009	.0268	-.0829	-.1355	-.0671	-.0349	-.0248	-.0131
30.000			.5490	.0081	-.3653	-.3625	-.0624	.0449	.0629	-.1724	-.1484	-.0721	-.0189	-.0182	-.0045
60.000			.5478	.0105	-.3475	-.2363	-.0198	.1608	.2067	-.4470	-.3138	-.0997	.0132	.0115	.0170
90.000		.9327	.5024	-.0271	-.3870	-.1939	.0516	.2575	.3986		-.6021	-.1782	-.0350	-.0687	-.0312
120.000			.4222	-.1012	-.4529	-.3036	-.0445	.0887	.0811	-.2092	-.4370	-.0917	-.0005	-.0514	.0191
135.000								.0482		.0415		-.1824		-.0660	
150.000			.3595	-.1715	-.5097	-.4527	-.0808	.0324	.0710	.2053	.0396	-.1541	-.1384	-.1476	-.0093
165.000				-.2080	-.5412	-.4968	-.0825	.0369	.1043	.2584	.2027	-.2109	-.1622	-.1368	.0181
180.000	1.0840	.7487	.2867	-.2424	-.5505	-.3513	-.0672	.0651	.1315	.2521	.2325	-.3657	-.1781	-.1580	-.0098
270.000		.7323							.4364						

X/LT	.7460	.8530	.9280
PHI			
.000	.0029	-.0011	-.2131
30.000	.0198	.0270	-.1893
60.000	.0443	.0715	-.0765
90.000	.0683	.1137	
120.000	.1405	.1565	.4840
135.000	.1572	.1888	.3032
150.000	.1306	.1969	.2772
165.000	.1513	.2145	.4346
180.000	.1351	.1872	.3123

ALPHAO(8) = 4.040 BETAO (5) = -1.980

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0980	.9431	.5141	-.0236	-.4082	-.4705	-.1094	.0164	.0421	-.0799	-.1198	-.0611	-.0260	-.0142	.0012
30.000			.5311	-.0049	-.3921	-.4487	-.0926	.0536	.0788	-.1459	-.1388	-.0730	-.0196	-.0113	.0024
60.000			.5016	-.0312	-.3999	-.3109	-.0172	.1662	.2171	-.4175	-.2931	-.1130	-.0003	.0046	.0100
90.000		.8880	.4473	-.0783	-.4368	-.1812	.0582	.2636	.4108		-.6183	-.1926	-.0633	-.0976	-.0478
120.000			.3823	-.1391	-.4841	-.3354	-.0180	.1087	.1094	-.2127	-.4281	-.1132	-.0191	-.0688	.0125
135.000								.0719		.0356		-.1599		-.0892	
150.000			.3389	-.1840	-.5105	-.4567	-.0538	.0575	.0968	.1999	-.0686	-.1673	-.1518	-.1618	-.0222
165.000				-.2127	-.5297	-.3936	-.0656	.0509	.1219	.2536	.1785	-.2561	-.1661	-.1399	.0195
180.000	1.0960	.7533	.2945	-.2350	-.5561	-.2879	-.0521	.0560	.1231	.2455	.2419	-.3719	-.1582	-.1237	.0041
270.000		.7843							.4303						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHA0(8) = 4.040 BETA0 (5) = -1.980

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0176	.0125	-.1996
30.000	.0208	.0313	-.1840
60.000	.0394	.0679	-.0664
90.000	.0616	.1093	
120.000	.1292	.1331	.4309
135.000	.1377	.1708	.2529
150.000	.1056	.1683	.2284
165.000	.1372	.1929	.3960
180.000	.1208	.1708	.2894

ALPHA0(8) = 4.050 BETA0 (6) = .030

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0960	.9460	.5143	-.0213	-.4034	-.4698	-.1030	.0210	.0446	-.0839	-.1106	-.0553	-.0207	-.0055	.0061
30.000			.4955	-.0432	-.4175	-.4798	-.0850	.0532	.0858	-.1304	-.1398	-.0682	-.0231	-.0143	-.0037
60.000			.4507	-.0823	-.4499	-.3531	-.0143	.1641	.2264	-.3975	-.2726	-.0895	-.0167	-.0153	-.0001
90.000		.8340	.3915	-.1281	-.4791	-.1879	.0619	.2666	.4183		-.6816	-.1868	-.0729	-.0965	-.0420
120.000			.3384	-.1855	-.5017	-.3608	-.0023	.1938	.1268	-.2175	-.4148	-.1306	-.0494	-.0802	.0117
135.000								.0883		.0317		-.1819		-.0911	
150.000			.3135	-.2183	-.5393	-.4304	-.0530	.0738	.1213	.1954	-.1477	-.2542	-.1871	-.1730	-.0405
165.000				-.2188	-.5501	-.3701	-.0626	.0569	.1330	.2529	.1575	-.2965	-.1794	-.1375	.0092
180.000	1.0960	.7496	.2993	-.2292	-.5494	-.3071	-.0557	.0591	.1313	.2512	.2414	-.3691	-.1415	-.1125	.0210
270.000		.8391							.4186						

X/LT	.7460	.8530	.9280
PHI			
.000	.0190	.0129	-.1989
30.000	.0171	.0250	-.1930
60.000	.0306	.0545	-.0842
90.000	.0541	.0845	
120.000	.1149	.1051	.3799
135.000	.1139	.1196	.1678
150.000	.0832	.1253	.1678
165.000	.1145	.1427	.1589
180.000	.1233	.1437	.1027

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(6) = 4.050 BETAO (7) = 2.050

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0930	.9412	.5091	-.0276	-.4119	-.4565	-.0194	.0173	.0435	-.0870	-.1110	-.0595	-.0261	-.0120	-.0033
30.000			.4591	-.0708	-.4527	-.5092	-.0820	.0523	.0886	-.1198	-.1408	-.0677	-.0292	-.0233	-.0114
60.000			.3958	-.1362	-.4938	-.4755	-.0041	.1718	.2352	-.2674	-.2505	-.0919	-.0280	-.0233	-.0036
90.000		.7810	.3337	-.1866	-.5246	-.1743	.0721	.2715	.4301		-.7052	-.1792	-.0799	-.0990	-.0494
120.000			.2941	-.2269	-.5448	-.4095	.0212	.1434	.1535	-.2660	-.4043	-.1503	-.0760	-.0886	.0061
135.000								.1055		.0294		-.2203		-.1115	
150.000			.2893	-.2407	-.5635	-.2828	-.0411	.0852	.1397	.1874	-.1897	-.3296	-.2292	-.1956	-.0301
165.000				-.2373	-.5572	-.3913	-.0608	.0626	.1409	.2483	.1378	-.2959	-.1560	-.1258	.0071
180.000	1.0930	.7500	.2998	-.2308	-.5494	-.4442	-.0709	.0558	.1314	.2493	.2471	-.3951	-.1452	-.1377	.0056
270.000		.6906							.4096						

X/LT	.7460	.8530	.9280
PHI			
.000	.0154	.0082	-.1988
30.000	.0142	.0166	-.1978
60.000	.0242	.0426	-.1018
90.000	.0470	.0654	
120.000	.1030	.0867	.3380
135.000	.1079	.1037	.1116
150.000	.0936	.0941	.0341
165.000	.1098	.1383	.2006
180.000	.1147	.1513	.1341

ALPHAO(8) = 4.030 BETAO (8) = 4.050

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0830	.9201	.4985	-.0353	-.4096	-.4580	-.0851	.0091	.0286	-.0867	-.1199	-.0659	-.0324	-.0182	-.0093
30.000			.4156	-.1071	-.4761	-.5333	-.0871	.0490	.0881	-.1075	-.1499	-.0689	-.0365	-.0285	-.0134
60.000			.3382	-.1857	-.5231	-.4628	.0018	.1739	.2420	-.3418	-.2390	-.0778	-.0327	-.0315	-.0080
90.000		.7308	.2808	-.2364	-.5581	-.1568	.0815	.2789	.4405		-.7307	-.1467	-.0780	-.0959	-.0472
120.000			.2525	-.2698	-.5280	-.3243	.0336	.1570	.1727	-.2542	-.3803	-.1658	-.0996	-.0914	.0002
135.000								.1141		.0229		-.2255		-.1168	
150.000			.2625	-.2698	-.5695	-.2348	-.0340	.0918	.1529	.1748	-.2014	-.3740	-.2605	-.1891	-.0407
165.000				-.2481	-.5569	-.3250	-.0605	.0600	.1420	.2390	.1171	-.2962	-.1570	-.1332	-.0132
180.000	1.0830	.7591	.2947	-.2338	-.5479	-.4081	-.0733	.0448	.1233	.2388	.2415	-.4074	-.1607	-.1652	-.0118
270.000		.9438							.4064						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(8) = 4.030 BETAO (8) = 4.050

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0085	-.0005	-.2369
30.000	.0073	.0113	-.2399
60.000	.0168	.0358	-.1217
90.000	.0465	.0603	
120.000	.0927	.0733	.2900
135.000	.0932	.1062	.0849
150.000	.0481	.0603	.0149
165.000	.1015	.1304	.1935
180.000	.1059	.1407	.1756

ALPHAO(8) = 4.020 BETAO (9) = 6.070

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0590	.9051	.4869	-.0480	-.4118	-.4581	-.1670	-.0123	.0065	-.1025	-.1645	-.0813	-.0434	-.0368	-.0282
30.000			.3765	-.1525	-.5115	-.4829	-.0413	.0367	.0790	-.1015	-.1818	-.0736	-.0448	-.0378	-.0272
60.000			.2826	-.2417	-.5664	-.5308	.0289	.1808	.2548	-.3297	-.2238	-.0637	-.0450	-.0383	-.0165
90.000		.6739	.2256	-.2918	-.5912	-.1466	.0899	.2910	.4511		-.7474	-.1179	-.0794	-.0849	-.0326
120.000			.2065	-.3125	-.5567	-.2598	.0404	.1724	.1901	-.2773	-.3721	-.1880	-.1324	-.1014	-.0134
135.000								.1192		.0120		-.2296		-.1463	
150.000			.2229	-.3113	-.5908	-.2359	-.0315	.0929	.1575	.1622	-.2701	-.4460	-.2798	-.2124	-.0749
165.000				-.2714	-.5757	-.3512	-.0666	.0526	.1343	.2231	.0904	-.2959	-.1902	-.1621	-.0517
180.000	1.0590	.7419	.2760	-.2437	-.5523	-.4989	-.0838	.0261	.1059	.2148	.2077	-.3695	-.2201	-.1976	-.0594
270.000		.9812							.3983						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0156	-.0236	-.2308
30.000	-.0080	.0007	-.2234
60.000	.0028	.0174	-.1452
90.000	.0403	.0547	
120.000	.0764	.0774	.2455
135.000	.0[illegible]	.0995	.0734
150.000	.0[illegible]	.0454	-.0014
165.000	.0[illegible]	.1095	.1929
180.000	.0651	.1090	.1813

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(8) = 4.010 BETAO (10) = 8.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0270	.8691	.4672	-.0637	-.4222	-.4728	-.2022	-.0472	-.0853	-.1115	-.1829	-.0998	-.0751	-.0594	-.0548
30.000			.3235	-.1946	-.5408	-.5327	-.0640	.0170	.0654	-.0920	-.2315	-.0812	-.0597	-.0567	-.0444
60.000			.2213	-.2907	-.5957	-.5454	.0464	.1827	.2641	-.3057	-.2051	-.0499	-.0552	-.0508	-.0373
90.000		.6141	.1703	-.3286	-.6304	-.1354	.0777	.2901	.4676		-.7710	-.0887	-.0757	-.0811	-.0380
120.000			.1571	-.3333	-.6199	-.1481	.0381	.1791	.2143	-.3011	-.3493	-.2147	-.1658	-.1349	-.0448
135.000								.1205		.0011		-.2409		-.1895	
150.000			.1857	-.3264	-.6168	-.2494	-.0256	.0943	.1620	.1388	-.3384	-.4716	-.2894	-.2456	-.1015
165.000				-.2929	-.5986	-.4261	-.0715	.0394	.1261	.1964	.0649	-.3066	-.2313	-.2156	-.0837
180.000	1.0270	.6371	.2668	-.2531	-.5784	-.5330	-.0929	.0022	.0825	.1846	.1659	-.3745	-.2617	-.2569	-.1012
270.000		1.0300							.3956						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0495	-.0527	-.2536
30.000	-.0274	-.0175	-.2332
60.000	-.0132	-.0044	-.1747
90.000	.0340	.0546	
120.000	.0585	.0680	.2653
135.000	.0504	.0825	.0795
150.000	.0025	.0212	-.0230
165.000	.0359	.0803	.1767
180.000	.0163	.0726	.1644

ALPHAO(8) = 4.000 BETAO (11) = 10.130

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9849	.8254	.4334	-.0725	-.4258	-.4767	-.2891	-.0852	-.0596	-.1277	-.2108	-.1189	-.0974	-.0941	-.0912
30.000			.2713	-.2328	-.5706	-.6243	-.1462	-.0102	.0516	-.0951	-.2226	-.0851	-.0719	-.0712	-.0663
60.000			.1640	-.3374	-.6067	-.5333	.0427	.1757	.2644	-.2972	-.1614	-.0424	-.0670	-.0685	-.0540
90.000		.5563	.1198	-.3701	-.6339	-.0991	.0730	.2745	.4796		-.7206	-.0572	-.0791	-.0779	-.0491
120.000			.1117	-.3691	-.5414	-.1168	.0363	.1612	.2208	-.2908	-.3633	-.2399	-.1912	-.1564	-.0739
135.000								.1127		-.0110		-.2707		-.2068	
150.000			.1410	-.3691	-.6422	-.1986	-.0241	.0873	.1596	.1205	-.3919	-.4764	-.3072	-.2619	-.1295
165.000				-.3099	-.6189	-.4385	-.0810	.0271	.1044	.1612	.0179	-.3320	-.2806	-.2609	-.1108
180.000	.9849	.5824	.2568	-.2634	-.5743	-.5881	-.1016	-.0079	.0487	.1426	.1272	-.3636	-.3724	-.3052	-.1425
270.000		1.0700							.3951						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(8) = 4.000 BETAO (11) = 10.130

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7450	.8530	.9280
PHI			
.000	-.0766	-.0930	-.3084
30.000	-.0443	-.0434	-.2568
60.000	-.0352	-.0172	-.1739
90.000	.0142	.0352	
120.000	.0337	.0296	.2981
135.000	.0315	.0713	.0777
150.000	-.0073	.0072	-.0509
165.000	.0077	.0554	.1646
180.000	-.0251	.0365	.1403

ALPHAO(9) = 6.000 BETAO (1) = -9.980

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9683	.8652	.4895	-.0269	-.3925	-.4427	-.3612	-.0739	-.0446	- 0975	-.1492	-.1053	-.0850	-.0855	-.0823
30.000			.6553	.1379	-.2282	-.2678	-.1286	.0242	.0283	-.1503	-.1040	-.0448	-.0249	-.0251	-.0150
60.000			.7239	.2075	-.1308	-.1339	.0186	.1890	.2193	-.4558	-.1800	-.0035	.0568	.0467	.0488
90.000		1.0450	.6621	.1536	-.1756	-.1403	.0701	.2513	.3521		-.4846	-.1185	-.0106	-.0391	.0007
120.000			.5007	-.0069	-.3231	-.2942	-.1394	-.0185	-.0491	-.1386	-.4538	-.0224	.1262	.0660	.0802
135.000								-.0789		.0182		-.0713		.0348	
150.000			.3493	-.1571	-.4678	-.4627	-.2236	-.0917	-.0700	.1946	.0584	-.1810	-.1193	-.1048	-.0059
165.000				-.2520	-.5691	-.5659	-.1389	-.0782	.0135	.2068	.1867	-.0879	-.1116	-.1409	.0096
180.000	.9683	.6693	.1913	-.3134	-.5890	-.5344	-.1076	-.0183	.0907	.2262	.2066	-.3232	-.2372	-.1863	-.0389
270.000		.5284							.4504						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0738	-.0929	-.3034
30.000	.0039	-.0003	-.2503
60.000	.0669	.0958	-.1143
90.000	.0606	.0299	
120.000	.2073	.2043	.1438
135.000	.2252	.2441	.3840
150.000	.1647	.2468	.4500
165.000	.1693	.2406	.5379
180.000	.1266	.1882	.3295

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(9) = 5.930 BETAO (2) = -7.960

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0130	.9147	.5218	-.0030	-.3763	-.4218	-.3342	-.0288	-.0042	-.0742	-.1229	-.0719	-.0564	-.0516	-.0480
30.000			.6434	.1176	-.2523	-.2815	-.1371	.0447	.0586	-.1437	-.0954	-.0329	-.0034	-.0107	-.0022
60.000			.6767	.1531	-.2034	-.1780	.0085	.1852	.2346	-.4215	-.1844	-.0162	.0507	.0419	.0358
90.000		1.0050	.6076	.0939	-.2434	-.1724	.0566	.2429	.3581		-.4945	-.1434	-.0139	-.0303	-.0168
120.000			.4665	-.0483	-.3739	-.3154	-.1229	.0031	-.0270	-.1525	-.4840	-.0855	.1009	.0446	.0695
135.000								-.0417		.0220		-.1311		.0083	
150.000			.3426	-.1733	-.5038	-.4811	-.1579	-.0495	-.0232	.1909	.0619	-.1964	-.0972	-.1077	.0061
165.000				-.2475	-.5805	-.5249	-.0609	-.0302	.0510	.2285	.2031	-.1491	-.1055	-.1401	.0288
180.000	1.0130	.6882	.2202	-.2967	-.6035	-.4678	-.0917	.0151	.1112	.2370	.2215	-.3212	-.2169	-.1551	-.0155
270.000		.5951							.4347						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0364	-.0499	-.2482
30.000	.0171	.0207	-.2104
60.000	.0695	.0936	-.0997
90.000	.0729	.0516	
120.000	.1938	.2003	.6107
135.000	.2082	.2297	.3737
150.000	.1612	.2361	.4201
165.000	.1776	.2463	.5161
180.000	.1362	.1955	.3287

ALPHAO(9) = 5.960 BETAO (3) = -5.980

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0420	.9534	.5474	.0225	-.3662	-.4142	-.2962	-.0049	.0295	-.0565	-.1021	-.0328	-.0301	-.0299	-.0223
30.000			.6311	.1002	-.2833	-.3069	-.1553	.0603	.0806	-.1335	-.0957	-.0274	-.0002	-.0024	.0032
60.000			.6299	.1007	-.2544	-.2216	-.0088	.1849	.2427	-.4026	-.2107	-.0291	.0353	.0267	.0306
90.000		.9561	.5461	.0315	-.3100	-.2039	.0459	.2419	.3597		-.5292	-.1709	-.0264	-.0629	-.0124
120.000			.4198	-.0894	-.4354	-.3178	-.1033	.0224	-.0085	-.1571	-.5043	-.1400	.0585	.0165	.0529
135.000								-.0174		.0227		-.1835		-.0179	
150.000			.3183	-.1975	-.5359	-.4696	-.1212	-.0206	.0013	.1981	.0350	-.2213	-.1008	-.1185	.0018
165.000				-.2634	-.5782	-.5262	-.0672	.0028	.0719	.2320	.1890	-.1862	-.1141	-.1180	.0302
180.000	1.0420	.8895	.2243	-.3394	-.5928	-.3265	-.0863	.0498	.1219	.2369	.2218	-.3393	-.1795	-.1323	.0047
270.000		.6537							.4170						

X/LT	.7480	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHA0(9) = 5.960 BETA0 (3) = -5.960

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0028	-.0138	-.2160
30.000	.0316	.0361	-.1906
60.000	.0624	.0688	-.0512
90.000	.0614	.0452	
120.000	.1761	.1800	.5819
135.000	.1895	.2184	.3447
150.000	.1510	.2287	.3738
165.000	.1726	.2354	.4839
180.000	.1422	.1984	.3182

ALPHA0(9) = 5.950 BETA0 (4) = -3.970

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0620	.9740	.5624	.0312	-.3552	-.4112	-.1275	.0114	.0523	-.0552	-.0934	-.0386	-.0255	-.0090	-.0029
30.000			.5994	.0709	-.3186	-.3240	-.0549	.0620	.0963	-.1233	-.0939	-.0282	.0044	.0052	.0074
60.000			.5730	.0480	-.3299	-.2380	-.0125	.1776	.2517	-.3857	-.2144	-.0480	.0340	.0142	.0138
90.000		.9119	.4975	-.0223	-.3917	-.2029	.0440	.2395	.3680		-.5275	-.1820	-.0082	-.0506	-.0236
120.000			.3874	-.1329	-.4840	-.2913	-.0775	.0509	.0208	-.1507	-.5080	-.1798	.0203	-.0137	.0350
135.000								.0198		.0351		-.2526		-.0412	
150.000			.3100	-.2138	-.5466	-.4822	-.0913	.0169	.0371	.1914	.0034	-.2110	-.1137	-.1296	.0044
165.000				-.2614	-.5831	-.5222	-.0689	.0323	.0944	.2377	.1831	-.2135	-.1329	-.1086	.0306
180.000	1.0620	.6912	.2382	-.2899	-.6031	-.2906	-.0632	.0550	.1172	.2372	.2215	-.3707	-.1590	-.1279	.0044
270.000		.7112							.4024						

X/LT	.7460	.8530	.9280
PHI			
.000	.0193	.0060	-.1896
30.000	.0376	.0433	-.1724
60.000	.0547	.0824	-.0766
90.000	.0672	.0522	
120.000	.1587	.1798	.5115
135.000	.1693	.2027	.3171
150.000	.1456	.2044	.2975
165.000	.1702	.2317	.4399
180.000	.1486	.2063	.3145

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (L81T31)

ALPHA0(91) = 5.940 BETA0 (5) = -1.960

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0760	.9864	.5692	.0391	-.3548	-.4151	-.1113	.0274	.0622	-.0504	-.0780	-.0378	-.0109	.0051	.0084
30.000			.5765	.0440	-.3499	-.3901	-.0847	.0673	.1062	-.1068	-.0943	-.0469	-.0025	.0039	.0130
60.000			.5230	-.0028	-.3889	-.2831	-.0164	.1780	.2574	-.3575	-.2155	-.0706	.0214	.0017	-.0145
90.000		.8659	.4382	-.0766	-.4478	-.1992	.0460	.2482	.3763		-.5253	-.2007	-.0345	-.0627	-.0268
120.000			.3484	-.1685	-.5159	-.2873	-.0490	.0703	.0510	-.1557	-.4925	-.2104	-.0064	-.0361	.0266
135.000								.0468		.0413		-.2595		-.0585	
150.000			.2904	-.2311	-.5471	-.4990	-.0468	.0434	.0674	.1973	-.0386	-.2062	-.1255	-.1372	-.0066
165.000				-.2668	-.5003	-.3879	-.0610	.0476	.1138	.2431	.1777	-.2780	-.1469	-.1172	.0305
180.000	1.0760	.6944	.2415	-.2903	-.5895	-.2631	-.0544	.0524	.1238	.2440	.2343	-.3686	-.1395	-.1030	.0148
270.000		.7626							.3952						

X/LT	.7460	.8530	.9280
PHI			
.000	.0283	.0221	-.1793
30.000	.0356	.0426	-.1697
60.000	.0488	.0740	-.0811
90.000	.0717	.0800	
120.000	.1442	.1543	.2160
135.000	.1493	.1873	.2533
150.000	.1161	.1810	.2272
165.000	.1901	.2093	.4040
180.000	.1308	.1893	.2913

ALPHA0(9) = 5.940 BETA0 (6) = .040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0760	.9936	.5716	.0347	-.3589	-.4121	-.1060	.0355	.0642	-.0493	-.0905	-.0408	-.0063	.0040	.0180
30.000			.5400	.0052	-.3851	-.4376	-.0875	.0656	.1063	-.0902	-.1178	-.0487	-.0090	-.0063	.0081
60.000			.4734	-.0523	-.4379	-.4548	-.0093	.1785	.2601	-.3284	-.2121	-.0623	.0062	.0013	.0045
90.000		.8141	.3785	-.1393	-.4934	-.2365	.0521	.2536	.3843		-.5948	-.1909	-.0673	-.0741	-.0231
120.000			.2032	-.2132	-.5387	-.2664	-.0218	.0904	.0774	-.1345	-.4902	-.2270	-.0433	-.0495	.0240
135.000								.0701		.0583		-.2485		-.0882	
150.000			.2637	-.2603	-.5685	-.5038	-.0343	.0615	.0995	.1871	-.1094	-.2618	-.1698	-.1535	-.0348
165.000				-.2780	-.5835	-.3757	-.0593	.0532	.1300	.2531	.1637	-.3312	-.1698	-.1203	.0167
180.000	1.0760	.6964	.2447	-.2872	-.5857	-.3145	-.0637	.0544	.1329	.2528	.2436	-.3868	-.1378	-.0856	.0270
270.000		.8214							.3835						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHA(9) = 5.940 BETA(6) = .040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	.0275	.0240	-.1764
30.000	.0299	.0380	-.1794
60.000	.0360	.0655	-.0880
90.000	.0522	.0860	
120.000	.1242	.1360	.3558
135.000	.1267	.1404	.1763
150.000	.0887	.1412	.1756
165.000	.1265	.1516	.1773
180.000	.1333	.1581	.1247

ALPHA(9) = 5.940 BETA(7) = 2.060

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2930	.3440	.3940	.4510	.5050	.5580	.6360
PHI															
.000	1.0720	.9866	.5661	.0903	-.3615	-.4074	-.0751	.0306	.0608	-.0541	-.0821	-.0405	-.0090	.0003	.0125
30.000			.5017	-.0250	-.4154	-.4710	-.0909	.0560	.1043	-.0847	-.1201	-.0464	-.0202	-.0136	-.0029
60.000			.4067	-.1198	-.4853	-.5166	-.0079	.1747	.2705	-.3091	-.1867	-.0625	-.0102	-.0140	-.0020
90.000		.7932	.3217	-.1947	-.5358	-.2504	.0597	.2637	.3934		-.6077	-.1645	-.0930	-.0775	-.0195
120.000			.2603	-.2567	-.5761	-.2574	.0022	.1112	.1033	-.1365	-.4891	-.1961	-.0750	-.0758	.0145
135.000								.0936		.0454		-.2555		-.0899	
90.000			.2388	-.2921	-.5930	-.3659	-.0364	.0774	.1188	.1728	-.1985	-.3238	-.2101	-.1701	-.0177
165.000				-.2902	-.5904	-.3809	-.0550	.0595	.1303	.2419	.1336	-.3225	-.1519	-.1081	.0140
180.000	1.0720	.6948	.2432	-.2895	-.5841	-.3365	-.0668	.0522	.1259	.2393	.2378	-.4000	-.1359	-.1059	.0094
270.000		.8752							.3760						

X/LT	.7480	.8530	.9280
PHI			
.000	.0272	.0218	-.1800
30.000	.0211	.0301	-.1859
60.000	.0369	.0514	-.1117
90.000	.0517	.0514	
120.000	.1165	.1168	.3176
135.000	.1175	.1249	.1167
150.000	.1004	.1171	.0449
165.000	.1229	.1554	.2218
180.000	.1305	.1572	.1519

ARC11-716 IA14 C1+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(9) = 5.990 BETAO (8) = 4.070

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0650	.9672	.5509	.0192	-.3662	-.4169	-.1957	.0191	.0479	-.0805	-.1028	-.0418	-.0206	-.0135	-.0012
30.000			.4557	-.0616	-.4523	-.4983	-.0891	.0461	.1004	-.0804	-.1233	-.0366	-.0276	-.0323	-.0175
60.000			.3513	-.1722	-.5243	-.5777	-.0100	.1707	.2665	-.2871	-.1196	-.0616	-.0229	-.0311	-.0153
90.000		.7105	.2678	-.2518	-.5752	-.2258	.0683	.2693	.4015		-.6113	-.1167	-.1006	-.0799	-.0165
120.000			.2189	-.2978	-.6071	-.2232	.0226	.1290	.1256	-.2400	-.4543	-.1976	-.0969	-.0821	.0082
135.000								.1072		.0150		-.2242		-.0994	
150.000			.2163	-.3162	-.6042	-.2399	-.0324	.0837	.1367	.1597	-.2317	-.3629	-.2417	-.1842	-.0294
165.000				-.2999	-.6056	-.3349	-.0562	.0568	.1314	.2266	.1077	-.3043	-.1474	-.1208	-.0147
180.000	1.0650	.7001	.3133	-.2861	-.5896	-.4553	-.0771	.0421	.1135	.2195	.2320	-.4165	-.1424	-.1458	-.0113
270.000		.9245							.3710						

X/LT	.7480	.8530	.9280
PHI			
.000	.0171	.0066	-.1948
30.000	.0149	.0182	-.1998
60.000	.0156	.0292	-.1432
90.000	.0371	.0253	
120.000	.0995	.0949	.2697
135.000	.1022	.1163	.0817
150.000	.0582	.0699	.0161
165.000	.1077	.1411	.1909
180.000	.1131	.1553	.1772

ALPHAO(9) = 5.990 BETAO (9) = 6.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0380	.9516	.5407	.0143	-.3515	-.4039	-.2417	-.0061	.0228	-.0735	-.1100	-.0543	-.0353	-.0264	-.0260
30.000			.4118	-.1100	-.4789	-.4951	-.1810	.0299	.0864	-.0765	-.1458	-.0538	-.0388	-.0412	-.0379
60.000			.2917	-.2287	-.5698	-.5254	.0292	.1730	.2809	-.2694	-.1355	-.0053	-.0306	-.0321	-.0275
90.000		.6519	.2209	-.3024	-.6062	-.1767	.0629	.2706	.4157		-.5695	-.0425	-.0844	-.0770	-.0167
120.000			.1756	-.3270	-.6377	-.1607	.0324	.1439	.1478	-.2729	-.4301	-.2209	-.1251	-.1008	-.0016
135.000								.1143		.0084		-.2258		-.1387	
150.000			.1819	-.3275	-.6368	-.2286	-.0262	.0886	.1419	.1480	-.2689	-.4233	-.2621	-.1982	-.0725
165.000				-.3176	-.6217	-.3413	-.0603	.0522	.1229	.2110	.0843	-.3115	-.1787	-.1515	-.0430
180.000	1.0380	.6834	.2232	-.2940	-.5967	-.5060	-.0819	.0238	.0963	.2022	.2008	-.3673	-.1861	-.1776	-.0551
270.000		.9529							.3673						

X/LT	.7480	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(9) = 5.990 BETAO (9) = 6.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0065	-.0126	-.2144
30.000	-.0063	-.0010	-.2100
60.000	.0037	.0150	-.1597
90.000	.0402	.0216	
120.000	.0891	.0991	.2227
135.000	.0837	.1045	.0736
150.000	.0363	.0557	.0005
165.000	.0741	.1192	.2021
180.000	.0739	.1163	.1948

ALPHAO(9) = 6.020 BETAO (10) = 8.130

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0050	.9126	.5172	.0005	-.3567	-.4195	-.2137	-.0437	-.0074	-.0882	-.1332	-.0753	-.0597	-.0570	-.0465
30.000			.3569	-.1540	-.5141	-.5414	-.2670	.0012	.0640	-.0738	-.1673	-.0614	-.0580	-.0585	-.0510
60.000			.2258	-.2800	-.6003	-.5453	.0308	.1724	.2837	-.2466	-.1150	.0027	-.0308	-.0404	-.0350
90.000		.5902	.1593	-.3492	-.6407	-.1441	.0741	.2729	.4277		-.5110	.0042	-.0748	-.0677	-.0195
120.000			.1283	-.3463	-.6380	-.1185	.0433	.1515	.1635	-.2695	-.4028	-.2572	-.1534	-.1100	-.0323
135.000								.1144		-.0013		-.2413		-.1712	
150.000			.1424	-.3527	-.6420	-.2030	-.0277	.0863	.1475	.1372	-.3110	-.4682	-.2793	-.2426	-.0900
165.000				-.3354	-.6235	-.3308	-.0674	.0428	.1189	.1947	.0617	-.2977	-.2083	-.2003	-.0780
180.000	1.0050	.5697	.2151	-.2968	-.6129	-.5962	-.0939	.0007	.0672	.1745	.1608	-.3532	-.2330	-.2438	-.0878
270.000		1.0100							.3611						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0382	-.0487	-.2483
30.000	-.0286	-.0215	-.2254
60.000	-.0081	.0211	-.1519
90.000	.0362	.0387	
120.000	.0674	.0919	.2447
135.000	.0611	.0981	.0720
150.000	.0105	.0336	-.0203
165.000	.0556	.0916	.1854
180.000	.0316	.0813	.1630

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(9) = 5.990 BETAO (11) = 10.150

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9632	.8630	.4867	-.0181	-.3814	-.4423	-.2956	-.0822	-.0463	-.1113	-.1457	-.1102	-.0900	-.0909	-.0834
30.000			.2984	-.2033	-.5514	-.6081	-.1843	-.0300	.0456	-.0804	-.1847	-.0895	-.0775	-.0805	-.0689
60.000			.1671	-.3346	-.6418	-.5769	.0083	.1528	.2819	-.2283	-.1309	-.0142	-.0477	-.0538	-.0463
90.000		.5289	.1066	-.3876	-.6551	-.1089	.0377	.2512	.4424		-.4408	.0281	-.0595	-.0748	-.0362
120.000			.0839	-.3881	-.6444	-.1097	.0298	.1390	.1745	-.2628	-.3878	-.2652	-.1820	-.1512	-.0656
135.000								.0928		-.0104		-.2620		-.2083	
150.000			.1078	-.3927	-.6573	-.1802	-.0263	.0852	.1403	.1142	-.3575	-.4563	-.3020	-.2579	-.1232
165.000				-.3584	-.6486	-.3310	-.0751	.0324	.0981	.1616	.0256	-.3102	-.2531	-.2545	-.1003
180.000	.9632	.5016	.2033	-.3192	-.6110	-.6384	-.1028	-.0117	.0231	.1345	.1116	-.3445	-.3353	-.2958	-.1340
270.000		1.0490							.3629						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0730	-.0896	-.2956
30.000	-.0499	-.0482	-.2507
60.000	-.0157	-.0006	-.1573
90.000	.0191	.0335	
120.000	.0441	.0637	.3012
135.000	.0389	.0845	.0875
150.000	-.0023	.0210	-.0468
165.000	.0147	.0621	.1716
180.000	-.0156	.0383	.1395

ALPHAO(10) = 8.050 BETAO (1) = -9.970

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9368	.9036	.5384	.0343	-.3343	-.3857	-.3223	-.0693	-.0254	-.0735	-.1162	-.0913	-.0693	-.0636	-.0688
30.000			.7066	.1966	-.1719	-.2022	-.1126	.0521	.0708	-.0928	-.0809	-.0219	.0131	.0112	.0134
60.000			.7503	.2378	-.1156	-.1087	.0382	.2130	.2647	-.3961	-.1890	-.0017	.0891	.0749	.0692
90.000		1.0130	.6454	.1442	-.1896	-.1462	.0506	.2252	.3073		-.4240	-.1445	.0644	.0310	.0428
120.000			.4538	-.0438	-.3693	-.3320	-.1950	-.0818	-.1247	-.1339	-.3939	-.0985	.1186	.0849	.0864
135.000								-.1225		.0043		-.1264		.0643	
150.000			.2900	-.2119	-.5216	-.5119	-.2677	-.1264	-.1005	.1697	-.0303	-.1902	-.0636	-.0737	.0190
165.000				-.3053	-.6130	-.5864	-.1518	-.0823	.0112	.1902	.1636	-.0960	-.0732	-.1193	.0319
180.000	.9368	.6053	.1394	-.3603	-.6045	-.5479	-.1066	-.0067	.0902	.2131	.1863	-.3219	-.1942	-.1646	-.0407
270.000		.4974							.4040						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(10) = 8.050 BETAO (1) = -9.970

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0582	-.0734	-.2598
30.000	.0310	.0237	-.2049
60.000	.0994	.1181	-.0753
90.000	.1358	.1671	
120.000	.1925	.2022	.5402
135.000	.2211	.2473	.3669
150.000	.1573	.2304	.4352
165.000	.1659	.2335	.5047
180.000	.1208	.1823	.3054

ALPHAO(10) = 8.000 BETAO (2) = -7.950

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9835	.9535	.5746	.0595	-.3202	-.3695	-.2860	-.0224	.0136	-.0457	-.0885	-.0600	-.0339	-.0351	-.0301
30.000			.6905	.1685	-.2032	-.2261	-.1397	.0712	.0919	-.0752	-.0723	-.0184	.0205	.0183	.0256
60.000			.6963	.1777	-.1753	-.1531	.0188	.2053	.2700	-.3685	-.1727	-.0201	.0761	.0680	.0633
90.000		.9696	.5854	.0773	-.2559	-.1853	.0384	.2195	.3045		-.4556	-.2256	.0356	.0242	.0362
120.000			.4110	-.0899	-.4108	-.3440	-.1731	-.0540	-.1046	-.1334	-.3919	-.1550	.0961	.0650	.0696
135.000								-.0901		.0135		-.2098		.0413	
150.000			.2794	-.2306	-.5423	-.5073	-.1999	-.0864	-.0585	.1833	-.0073	-.2184	-.0529	-.0801	.0134
165.000				-.3034	-.6154	-.5665	-.1095	-.0396	.0461	.2080	.1674	-.1488	-.0753	-.1133	.0391
180.000	.9835	.6273	.1624	-.3479	-.6280	-.4100	-.1027	.0215	.1104	.2251	.1998	-.3489	-.1867	-.1273	-.0001
270.000		.5653							.3801						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0178	-.0332	-.2200
30.000	.0425	.0475	-.1620
60.000	.0899	.1194	-.0549
90.000	.1309	.1592	
120.000	.1747	.2220	.4785
135.000	.1967	.2308	.3201
150.000	.1454	.2163	.3814
165.000	.1651	.2282	.4562
180.000	.1319	.1875	.2831

ARC11-716 IA14 O1+TI2+S12N25+AT1O EXTERNAL TANK (RB1T31)

ALPHAO(10) = 7.980 BETAO (3) = -5.950

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0110	.9911	.5985	.0749	-.3073	-.3594	-.2474	.0033	.0455	-.0303	-.0680	-.0378	-.0148	-.0120	-.0060
30.000			.6728	.1433	-.2373	-.2491	-.1465	.0804	.1111	-.0760	-.0695	-.0219	.0171	.0210	.0302
60.000			.6448	.1245	-.2409	-.2023	.0001	.2022	.2738	-.3506	-.1819	-.0452	.0457	.0531	.0517
90.000		.9192	.5266	.0144	-.3245	-.2209	.0278	.2184	.3061		-.4470	-.2752	-.0035	.0009	.0207
120.000			.3679	-.1323	-.4723	-.3483	-.1429	-.0369	-.0794	-.1569	-.4020	-.1951	.0712	.0410	.0506
135.000								-.0588		.0282		-.2527		.0190	
150.000			.2566	-.2540	-.5724	-.5076	-.1591	-.0524	-.0256	.1833	-.0041	-.2470	-.0704	-.0909	.0115
165.000				-.3112	-.5995	-.5443	-.0664	-.0045	.0634	.2175	.1618	-.1848	-.0874	-.0877	.0418
180.000	1.0110	.6253	.1679	-.3470	-.6170	-.2719	-.0885	.0533	.1191	2297	.2126	-.3691	-.1507	-.1096	.0137
270.000		.6224							.3591						

X/LT	.7460	.8530	.9280
PHI			
.000	.0075	-.0012	-.1916
30.000	.0513	.0555	-.1494
60.000	.0810	.1111	-.0470
90.000	.1223	.1750	
120.000	.1642	.2204	.4553
135.000	.1793	.2240	.2893
150.000	.1454	.2074	.3165
165.000	.1665	.2221	.4298
180.000	.1434	.1917	.2893

ALPHAO(10) = 7.940 BETAO (4) = -3.970

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0320	1.0110	.6144	.0837	-.2974	-.3477	-.1317	.0229	.0653	-.0153	-.0549	-.0275	-.0041	.0023	.0121
30.000			.6462	.1170	-.2677	-.2838	-.0930	.0775	.1169	-.0651	-.0771	-.0220	.0150	.0153	.0288
60.000			.5906	.0651	-.2981	-.2422	-.0142	.1875	.2756	-.3273	-.1831	-.0434	.0388	.0359	.0406
90.000		.8776	.4712	-.0447	-.3963	-.2424	.0236	.2170	.3109		-.4609	-.2973	-.0495	-.0259	-.0002
120.000			.3350	-.1781	-.5101	-.3368	-.1153	-.0063	-.0486	-.1375	-.4264	-.2110	.0302	.0116	.0378
135.000								-.0231		.0352		-.2760		.0018	
150.000			.2456	-.2751	-.5829	-.5093	-.1195	-.0174	.0131	.1925	-.0110	-.2393	-.1087	-.0918	.0045
165.000				-.3149	-.6082	-.5015	-.0685	.0180	.0853	.2235	.1606	-.2229	-.1094	-.0607	.0285
180.000	1.0320	.8325	.1776	-.3412	-.6248	-.2315	-.0635	.0398	.1078	.2235	.2172	-.3789	-.1404	-.1030	.0008
270.000		.8763							.3454						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(10) = 7.940 BETAO (4) = -3.970

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0239	.0190	-.1740
30.000	.0518	.0589	-.1436
60.000	.0670	.1000	-.0469
90.000	.1113	.1711	
120.000	.1515	.2097	.3999
135.000	.1660	.2053	.2515
150.000	.1401	.1989	.2404
165.000	.1635	.2267	.3962
180.000	.1487	.1952	.2960

ALPHAO(10) = 7.940 BETAO (5) = -1.980

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.0430	1.0270	.6201	.0931	-.2970	-.3511	-.1181	.0333	.0782	-.0095	-.0455	-.0121	.0043	.0109	.0195
30.000			.6162	.0880	-.3002	-.3348	-.0867	.0733	.1248	-.0633	-.0723	-.0262	.0015	.0109	.0193
60.000			.5354	.0113	-.3579	-.2831	-.0193	.1818	.2816	-.3071	-.1825	.0068	.0189	.0246	.0293
90.000		.8301	.4134	-.1020	-.4610	-.2239	.0259	.2214	.3179		-.4762	-.1899	-.0756	-.0450	-.0143
120.000			.2956	-.2149	-.5487	-.2851	-.0878	.0175	-.0162	-.1395	-.4983	-.2127	-.0014	-.0079	.0194
135.000								.0045		.0447		-.3081		-.0312	
150.000			.2298	-.2874	-.5950	-.5296	-.0803	.0133	.0433	.1907	-.0624	-.2422	-.1127	-.1141	-.0031
165.000				-.3165	-.6213	-.2997	-.0683	.0349	.1030	.2287	.1696	-.2781	-.1207	-.0756	.0339
180.000	1.0430	.6348	.1813	-.3355	-.6162	-.2346	-.0644	.0443	.1145	.2361	.2388	-.3717	-.1269	-.0791	.0219
270.000		.7288							.3387						

X/LT	.7460	.8530	.9280
PHI			
.000	.0388	.0311	-.1678
30.000	.0469	.0550	-.1468
60.000	.0599	.0911	-.0886
90.000	.0997	.1519	
120.000	.1397	.1888	.3578
135.000	.1519	.1934	.2225
150.000	.1211	.1707	.1902
165.000	.1558	.2038	.4087
180.000	.1360	.1768	.3157

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(10) = 7.890 BETAO (6) = .030

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0490	1.0290	.6218	.0956	-.2925	-.3548	-.1091	.0413	.0825	-.0027	-.0230	-.0070	.0047	.0142	.0226
30.000			.5786	.0506	-.3353	-.3786	-.0948	.0668	.1234	-.0466	-.0543	-.0102	-.0022	.0020	.0126
60.000			.4735	-.0470	-.4117	-.3796	-.0214	.1748	.2879	-.2760	-.0923	-.0034	.0071	-.0003	.0057
90.000		.7797	.3550	-.1577	-.5042	-.2164	.0322	.2259	.3254		-.5054	-.1022	-.0532	-.0486	-.0075
120.000			.2578	-.2536	-.5733	-.2619	-.0570	.0444	.0137	-.1865	-.5296	-.1921	-.0296	-.0269	.0280
135.000								.0373		.0255		-.2345		-.0543	
150.000			.2114	-.3041	-.5983	-.5039	-.0558	.0402	.0736	.1676	-.1098	-.2511	-.1529	-.1357	-.0326
165.000				-.3242	-.6144	-.2959	-.0644	.0476	.1165	.2306	.1591	-.3082	-.1546	-.0999	.0253
180.000	1.0490	.6348	.1908	-.3310	-.6190	-.2648	-.0676	.0481	.1219	.2409	.2472	-.3816	-.1234	-.0656	.0380
270.000		.7892							.3311						

X/LT	.7460	.8530	.9280
PHI			
.000	.0405	.0355	-.1647
30.000	.0400	.0466	-.1733
60.000	.0387	.0690	-.1065
90.000	.0721	.0571	
120.000	.1300	.1506	.3638
135.000	.1354	.1588	.1832
150.000	.1049	.1546	.1744
165.000	.1354	.1705	.2017
180.000	.1396	.1746	.1422

ALPHAO(10) = 7.940 BETAO (7) = 2.060

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0440	1.0250	.6183	.0880	-.3097	-.3471	-.1908	.0410	.0785	-.0167	-.0484	-.0130	.0078	.0101	.0237
30.000			.5387	.0132	-.3791	-.4280	-.1081	.0567	.1174	-.0512	-.0830	-.0221	-.0100	-.0068	.0080
60.000			.4145	-.1073	-.4771	-.4998	-.0308	.1676	.2819	-.2512	-.1033	.0048	-.0063	-.0071	.0029
90.000		.7242	.2980	-.2153	-.5543	-.2642	.0420	.2363	.3383		-.4990	-.0742	-.0636	-.0567	-.0010
120.000			.2159	-.2921	-.6026	-.2323	-.0305	.0731	.0456	-.1819	-.5195	-.2092	-.0601	-.0530	.0191
135.000								.0615		.0356		-.2378		-.0722	
150.000			.1873	-.3296	-.6237	-.3024	-.0398	.0625	.1003	.1703	-.1828	-.3101	-.1978	-.1610	-.0200
165.000				-.3264	-.6121	-.2763	-.0585	.0515	.1242	.2293	.1311	-.2857	-.1311	-.0882	.0211
180.000	1.0440	.6332	.1863	-.3284	-.6206	-.3006	-.0712	.0461	.1154	.2274	.2352	-.4022	-.1199	-.0759	.0157
270.000		.8445							.3252						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 Ia14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(10) = 7.940 BETAO (7) = 2.060

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0363	.0340	-.1591
30.000	.0333	.0418	-.1720
60.000	.0333	.0533	-.1201
90.000	.0490	.0279	
120.000	.1235	.1328	.3027
135.000	.1193	.1372	.1225
150.000	.1078	.1198	.0577
165.000	.1288	.1657	.2391
180.000	.1323	.1709	.1608

ALPHAO(10) = 8.010 BETAO (8) = 4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
000	1.0300	1.0070	.6045	.0764	-.3069	-.3552	-.2335	.0239	.0631	-.0280	-.0668	-.0345	-.0056	.0032	.0091
30.000			.4899	-.0269	-.4089	-.4446	-.1477	.0367	.1050	-.0553	-.1085	-.0378	-.0234	-.0209	-.0103
60.000			.3518	-.1629	-.5259	-.4922	.0010	.1598	.2910	-.2395	-.1006	.0079	-.0076	-.0160	-.0125
90.000		.6680	.2401	-.2681	-.5931	-.2257	.0387	.2386	.3440		-.4804	-.0363	-.0495	-.0571	-.0014
120.000			.1731	-.3346	-.6306	-.1770	-.0130	.0872	.0693	-.1834	-.4953	-.2168	-.0948	-.0695	.0141
135.000								.0774		.0293		-.2372		-.0903	
150.000			.1593	-.3569	-.6328	-.1938	-.0409	.0695	.1115	.1555	-.2315	-.3474	-.2242	-.1709	-.0433
165.000				-.3459	-.6326	-.2277	-.0639	.0468	.1174	.2220	.1106	-.2847	-.1353	-.1044	-.0108
180.000	1.0300	.6361	.1738	-.3366	-.6318	-.2591	-.0881	.0338	.1030	.2131	.2276	-.3760	-.1209	-.1140	-.0123
270.000		.8942							.3159						

X/LT	.7460	.8530	.9280
PHI			
.000	.0273	.0173	-.1789
30.000	.0175	.0205	-.1901
60.000	.0158	.0313	-.1454
90.000	.0453	.0217	
120.000	.1056	.1115	.2351
135.000	.0953	.1186	.0706
150.000	.0417	.0747	.0163
165.000	.1073	.1382	.1937
180.000	.1036	.1384	.1732

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(10) = 8.000 BETAO (9) = 6.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0070	.9912	.5997	.0705	-.3130	-.3610	-.2456	.0050	.0396	-.0405	-.0862	-.0445	-.0175	-.0124	-.0053
30.000			.4465	-.0697	-.4543	-.4970	-.3709	.0175	.0886	-.0550	-.1349	-.0543	-.0359	-.0349	-.0319
60.000			.2955	-.2215	-.5690	-.5270	.0101	.1652	.2986	-.2071	-.1257	.0013	-.0024	-.0174	-.0126
90.000		.6148	.1915	-.3187	-.6330	-.2197	.0449	.2582	.3624		-.4846	-.0190	-.0312	-.0442	.0013
120.000			.1366	-.3580	-.6645	-.1734	.0048	.1147	.1042	-.1854	-.4824	-.2219	-.1120	-.0868	-.0022
135.000								.1027		.0297		-.2453		-.1198	
150.000			.1366	-.3438	-.6589	-.2105	-.0382	.0824	.1330	.1457	-.2625	-.3778	-.2476	-.1921	-.0684
165.000				-.3518	-.6548	-.2684	-.0590	.0536	.1201	.2111	.0846	-.3106	-.1555	-.1286	-.0394
180.000	1.0070	.6199	.1644	-.3418	-.6296	-.3823	-.0877	.0225	.0856	.1908	.1940	-.3427	-.1540	-.1500	-.0532
270.000		.9380							.3148						

X/LT	.7460	.8530	.9280
PHI			
.000	.0064	-.0015	-.1906
30.000	-.0066	.0027	-.1960
60.000	.0125	.0344	-.1363
90.000	.0475	.0403	
120.000	.0917	.1014	.2011
135.000	.0827	.1085	.0623
150.000	.0379	.0514	.0076
165.000	.0905	.1204	.1977
180.000	.0678	.1140	.1626

ALPHAO(10) = 7.980 BETAO (10) = 8.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9736	.9510	.5701	.0588	-.3279	-.3719	-.2038	-.0368	.0098	-.0613	-.0983	-.0756	-.0445	-.0357	-.0368
30.000			.3858	-.1216	-.4909	-.5335	-.4001	-.0163	.0628	-.0616	-.1562	-.0848	-.0620	-.0555	-.0544
60.000			.2247	-.2777	-.6100	-.5495	-.0048	.1998	.2993	-.1914	-.1302	-.0183	-.0115	-.0181	-.0128
90.000		.9544	.1338	-.3693	-.6643	-.1707	.0412	.2637	.3778		-.4772	.0007	-.0310	-.0529	-.0182
120.000			.0961	-.3811	-.6904	-.1267	.0129	.1313	.1313	-.1718	-.4715	-.2285	-.1386	-.1191	-.0311
135.000								.1126		.0271		-.2478		-.1710	
150.000			.1042	-.3848	-.6765	-.1907	-.0316	.0874	.1348	.1402	-.2874	-.4300	-.2588	-.2140	-.0818
165.000				-.3818	-.6541	-.2649	-.0629	.0481	.1081	.1867	.0556	-.3084	-.1800	-.1794	-.0688
180.000	.9736	.9003	.1590	-.3589	-.6448	-.5342	-.0924	.0098	.0549	.1602	.1413	-.3252	-.1973	-.2290	-.0846
270.000		.9819							.3111						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S.2N25+AT1D EXTERNAL TANK (RB1T31)

ALPHAD(10) = 7.980 BETAD (10) = 8.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0227	-.0358	-.2233
30.000	-.0303	-.0254	-.2171
60.000	.0084	.0285	-.1272
90.000	.0442	.0506	
120.000	.0761	.0979	.2224
135.000	.0677	.0979	.0590
150.000	.0093	.0442	-.0178
165.000	.0506	.0942	.1788
180.000	.0300	.0797	.1481

ALPHAD(10) = 7.990 BETAD (11) = 10.200

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	.9364	.9046	.5397	.0343	-.3290	-.3886	-.2809	-.0798	-.0317	-.0922	-.1286	-.1037	-.0841	-.0818	-.0727
30.000			.3323	-.1683	-.5284	-.5810	-.2348	-.0501	.0376	-.0618	-.1991	-.1348	-.0997	-.1049	-.0949
60.000			.1645	-.3336	-.6488	-.5902	-.0125	.1504	.2939	-.1548	-.1617	-.0696	-.0345	-.0288	-.0237
90.000		.4967	.0813	-.4049	-.6680	-.1539	.0199	.2591	.3859		-.4797	-.3006	-.1537	-.1521	-.1383
120.000			.0539	-.4293	-.5143	-.0994	.0267	.1137	.1475	-.1283	-.4552	-.2224	-.1576	-.1425	-.0669
135.000								.1019		.0328		-.2833		-.1684	
150.000			.0656	-.4236	-.6655	-.1663	-.0365	.0780	.1391	.1277	-.3356	-.4388	-.2590	-.2408	-.1173
165.000				-.3895	-.6735	-.2594	-.0722	.0349	.1038	.0605	.0111	-.3362	-.2179	-.2179	-.0835
180.000	.9364	.4383	.1422	-.3591	-.6475	-.2620	-.0997	-.0038	.0282	.1818	.0968	-.0394	-.2709	-.2589	-.1232
270.000		1.0250							.0172						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0615	-.0796	-.2705
30.000	-.0719	-.0610	-.2388
60.000	-.0046	.0225	-.1173
90.000	-.0073	.0599	
120.000	.0565	.0815	.2420
135.000	.0560	.0972	.0738
150.000	.0160	.0354	-.0347
165.000	.0283	.0718	.1709
180.000	-.0003	.0379	.1375

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(11) = 9.990 BETAO (1) = -9.930

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9028	.9416	.5949	.0881	-.2754	-.3330	-.2668	-.0567	-.0030	-.0352	-.0700	-.0784	-.0623	-.0584	-.0589
30.000			.7564	.2530	-.1227	-.1619	-.0795	.0871	.1093	-.0283	-.0068	.0175	.0246	.0232	.0358
60.000			.7686	.2618	-.0854	-.0906	.0544	.2337	.3011	-.3208	-.0307	.0580	.0805	.0808	.0807
90.000		.9801	.6221	.1276	-.1958	-.1624	.0427	.1971	.2463		-.3644	-.0789	.0525	.0526	.0682
120.000			.3925	-.0922	-.4037	-.3667	-.2517	-.1600	-.2147	-.1959	-.4367	-.0898	.1003	.0846	.0821
135.000								-.1895		-.0470		-.1003		.0773	
150.000			.2222	-.2696	-.5685	-.5531	-.3457	-.1708	-.1355	.1411	-.0793	-.1829	-.0438	-.0547	.0180
165.000				-.3585	-.6530	-.6627	-.1748	-.0857	.0151	.1714	.1304	-.0754	-.0579	-.0927	.0373
180.000	.9026	.5488	.0859	-.4023	-.6293	-.4612	-.1212	-.0030	.0914	.1858	.1684	-.3277	-.1925	-.1288	-.0230
270.000		.4641							.3349						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0449	-.0628	-.2532
30.000	.0530	.0471	-.1864
60.000	.1099	.1367	-.0870
90.000	.1432	.1272	
120.000	.1903	.1742	.5424
135.000	.2240	.2611	.3851
150.000	.1637	.2440	.4025
165.000	.1780	.2341	.5172
180.000	.1348	.1745	.3047

ALPHAO(11) = 10.010 BETAO (2) = -7.910

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9489	.9922	.6257	.1093	-.2657	-.3139	-.2333	-.0105	.0391	-.0101	-.0477	-.0449	-.0330	-.0358	-.0217
30.000			.7996	.2292	-.1509	-.1829	-.0955	.1042	.1268	-.0218	-.0063	.0197	.0297	.0300	.0445
60.000			.7163	.2025	-.1468	-.1365	.0330	.2234	.2995	-.3014	-.0395	.0558	.0708	.0651	.0656
90.000		.9325	.5611	.0566	-.2677	-.2128	.0276	.1876	.2339		-.3634	-.0836	.0423	.0376	.0533
120.000			.3533	-.1400	-.4467	-.3955	-.2416	-.1324	-.1984	-.2023	-.4526	-.1476	.0700	.0587	.0683
135.000								-.1503		-.0309		-.1431		.0455	
150.000			.2155	-.2893	-.5846	-.5466	-.2246	-.1331	-.0923	.1493	-.0544	-.1985	-.0547	-.0686	.0191
165.000				-.3552	-.6498	-.6062	-.1461	-.0565	.0396	.1852	.1195	-.1254	-.0647	-.0878	.0437
180.000	.9469	.5635	.1030	-.3912	-.6450	-.3453	-.1058	.0201	.1047	.1995	.1904	-.3667	-.1814	-.1115	.0042
270.000		.5290							.3138						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(11) = 10.010 BETAO (2) = -7.910

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0135	-.0264	-.2202
30.000	.0616	.0574	-.1733
60.000	.0948	.1231	-.0800
90.000	.1250	.1157	
120.000	.1756	.1794	.5348
135.000	.2073	.2427	.3581
150.000	.1807	.2336	.4153
165.000	.1755	.2347	.4990
180.000	.1413	.1679	.2948

ALPHAO(11) = 9.920 BETAO (3) = -5.920

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9689	1.0290	.6514	.1323	-.2466	-.2972	-.2008	.0170	.0669	.0050	-.0280	-.0225	-.0080	-.0048	.0025
30.000			.7206	.1972	-.1820	-.2091	-.1100	.1018	.1399	-.0228	-.0119	.0210	.0330	.0298	.0413
60.000			.6514	.1458	-.2186	-.1915	.0045	.2099	.3030	-.2878	-.0515	.0438	.0553	.0494	.0497
90.000		.8779	.5037	-.0026	-.3418	-.2561	.0131	.1851	.2382		-.4003	-.0933	.0293	.0143	.0384
120.000			.3130	-.1794	-.5020	-.3956	-.1966	-.1019	-.1675	-.2217	-.4796	-.1767	.0499	.0389	.0575
135.000								-.1150		-.0242		-.1908		.0153	
150.000			.1928	-.3108	-.6094	-.5451	-.1679	-.0914	-.0587	.1543	-.0433	-.2107	-.0831	-.0800	.0089
165.000				-.3630	-.6467	-.5412	-.1098	-.0241	.0596	.1969	.1155	-.1710	-.0901	-.0666	.0425
180.000	.9689	.5803	.1088	-.3920	-.6443	-.2429	-.0906	.0362	.1126	.2075	.2070	-.3790	-.1405	-.0973	.0116
270.000		.5835							.2940						

X/LT	.7460	.8530	.9280
PHI			
.000	.0155	.0040	-.1898
30.000	.0632	.0623	-.1638
60.000	.0835	.1083	-.0948
90.000	.1108	.0975	
120.000	.1655	.1883	.5160
135.000	.1881	.2252	.3324
150.000	.1506	.2242	.3749
165.000	.1750	.2380	.4451
180.000	.1519	.1971	.2795

ARC11-716 IA14 O6+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(11) = 9.940 BETAO (4) = -3.990

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	.9915	1.0530	.6696	.1482	-.2459	-.2900	-.1107	.0379	.0923	.0206	-.0115	-.0071	.0073	.0193	.0803
30.000			.6969	.1707	-.2170	-.2415	-.1177	.1006	.1503	-.0199	-.0083	.0164	.0306	.0355	.0438
60.000			.6088	.0925	-.2750	-.2383	-.0143	.2001	.3101	-.2676	-.0533	.0284	.0483	.0435	.0426
90.000		.8404	.4510	-.0535	-.4128	-.2616	.0032	.1854	.2476		-.4035	-.0938	.0056	-.0027	.0294
120.000			.2827	-.2069	-.5537	-.3611	-.1604	-.0677	-.1278	-.2095	-.5049	-.1642	.0141	.0122	.0445
135.000								-.0713		-.0056		-.2533		-.0139	
150.000			.1863	-.3148	-.6207	-.4645	-.1412	-.0478	-.0194	.1538	-.0575	-.2293	-.1182	-.0963	.0026
165.000				-.3614	-.6538	-.4390	-.0759	.0087	.0768	.2001	.1316	-.2112	-.0951	-.0658	.0396
180.000	.9915	.5752	.1257	-.3774	-.6544	-.2017	-.0754	.0347	.1027	.2133	.2197	-.3678	-.1276	-.0867	.0185
270.000		.6347							.2783						

X/LT	.7480	.8530	.9280
PHI			
.000	.0415	.0289	-.1608
30.000	.0677	.0675	-.1546
60.000	.0763	.0994	-.0970
90.000	.1062	.0935	
120.000	.1803	.1836	.4640
135.000	.1745	.2143	.2961
150.000	.1433	.2128	.2958
165.000	.1696	.2325	.4272
180.000	.1909	.2067	.3039

ALPHAO(11) = 9.940 BETAO (5) = -1.980

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.0060	1.0612	.6770	.1499	-.2407	-.2922	-.1039	.0513	.1019	.0285	-.0095	.0052	.0224	.0269	.0351
30.000			.6823	.1345	-.2587	-.3068	-.0828	.0905	.1481	-.0099	-.0241	.0096	.0223	.0245	.0378
60.000			.5906	.0293	-.3459	-.3228	-.0039	.1857	.3085	-.2434	-.0703	.0209	.0350	.0301	.0346
90.000		.7895	.3968	-.1182	-.4723	-.2942	.0003	.1901	.2537		-.4197	-.1130	-.0039	-.0058	.0282
120.000			.2484	-.2544	-.5826	-.3539	-.1223	-.0332	-.0926	-.1497	-.5274	-.1823	-.0120	-.0133	.0301
135.000								-.0334		.0143		-.2602		-.0337	
150.000			.1736	-.3326	-.6278	-.4574	-.1048	-.0140	.0183	.1622	-.1130	-.2466	-.1312	-.1123	-.0217
165.000				-.3583	-.6563	-.3479	-.0712	.0272	.0933	.2134	.1540	-.2647	-.1225	-.0709	.0343
180.000	1.0060	.5716	.1286	-.3617	-.6514	-.2434	-.0680	.0411	.1194	.2286	.2362	-.3554	-.1240	-.0672	.0245
270.000		.6924							.2718						

X/LT	.7480	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(11) = 9.940 BETAO (5) = -1.960

SECTION (11)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L*	.7460	.8530	.9280
PHI			
.000	.0509	.0418	-.1467
30.000	.0595	.0671	-.1494
60.000	.0648	.0887	-.1032
90.000	.0925	.0966	
120.000	.1392	.1706	.3795
135.000	.1455	.1956	.2336
150.000	.1096	.1868	.2186
165.000	.1469	.2115	.4117
180.000	.1286	.1857	.3060

ALPHAO(11) = 9.880 BETAO (6) = .040

SECTION (11)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L*	.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0140	1.0700	.6772	.1475	-.2403	-.3016	-.1013	.0587	.1048	.0298	-.0046	.0095	.0264	.0281	.0379
30.000			.6186	.0925	-.2945	-.3458	-.0994	.0752	.1413	-.0120	-.0417	-.0052	.0109	.0127	.0242
60.000			.4882	-.0542	-.4058	-.3808	-.0331	.1708	.3063	-.2147	-.0862	.0011	.0244	.0249	.0271
90.000		.7417	.3372	-.1757	-.5309	-.3162	.0078	.1962	.2614		-.4351	-.1220	-.0123	-.0196	.0237
120.000			.2139	-.2908	-.6083	-.3045	-.0891	.0011	-.0557	-.1821	-.5328	-.2181	-.0284	-.0250	.0220
135.000								.0058		.0272		-.2458		-.0438	
150.000			.1604	-.3464	-.6399	-.4568	-.0707	.0189	.0530	.1638	-.1462	-.2768	-.1542	-.1275	-.0356
165.000				-.3499	-.6598	-.2977	-.0570	.0428	.1100	.2229	.1511	-.2995	-.1448	-.0901	.0193
180.000	1.0140	.3737	.1370	-.3485	-.6479	-.2605	-.0763	.0445	.1168	.2317	.2440	-.3756	-.1240	-.0647	.0310
270.000		.7534							.2652						

X/L*	.7460	.8530	.9280
PHI			
.000	.0513	.0448	-.1440
30.000	.0489	.0564	-.1467
60.000	.0538	.0807	-.0988
90.000	.0893	.1005	
120.000	.1240	.1533	.3090
135.000	.1248	.1646	.1823
150.000	.0939	.1575	.1703
165.000	.1298	.1742	.2520
180.000	.1342	.1744	.1620

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(11) = 9.960 BETAO (7) = 2.070

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0080	1.0640	.6700	.1439	-.2507	-.2861	-.1820	.0545	.1019	.0223	-.0105	.0018	.0146	.0201	.0322
30.000			.5759	.0569	-.3345	-.3814	-.1144	.0557	.1352	-.0128	-.0670	-.0319	-.0083	-.0066	.0058
60.000			.4231	-.0913	-.4591	-.4993	-.0537	.1582	.3029	-.1896	-.1095	-.0165	.0054	.0157	.0217
90.000		.6872	.2826	-.2300	-.5744	-.3469	.0156	.2030	.2718		-.4502	-.3527	-.0966	-.0948	-.0344
120.000			.1778	-.3294	-.6292	-.2829	-.0631	.0328	-.0125	-.1654	-.4823	-.2317	-.0377	-.0364	.0179
135.000								.0367		.0432		-.2654		-.0455	
150.000			.1410	-.3596	-.6642	-.3496	-.0483	.0438	.0814	.1719	-.1584	-.3129	-.1787	-.1258	-.0168
165.000				-.3471	-.6586	-.2394	-.0631	.0480	.1164	.2276	.1477	-.3176	-.1144	-.0645	.0259
180.000	1.0080	.5737	.1361	-.3620	-.6635	-.2693	-.0778	.0392	.1083	.2276	.2396	-.4005	-.1102	-.0659	.0269
270.000		.8038							.2605						

X/LT	.7460	.8530	.9280
PHI			
.000	.0450	.0438	-.1453
30.000	.0365	.0428	-.1431
60.000	.0555	.0796	-.0812
90.000	.0790	.1223	
120.000	.1152	.1355	.2732
135.000	.1228	.1365	.1071
150.000	.1056	.1360	.0565
165.000	.1272	.1705	.2700
180.000	.1323	.1779	.2039

ALPHAO(11) = 9.990 BETAO (8) = 4.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9979	1.0480	.6588	.1332	-.2490	-.3003	-.1983	.0413	.0871	.0156	-.0161	-.0138	.0053	.0114	.0178
30.000			.5292	.0079	-.3712	-.4143	-.2750	.0374	.1168	-.0170	-.0821	-.0520	-.0317	-.0275	-.0126
60.000			.3623	-.1527	-.5111	-.4915	.0055	.1574	.3111	-.1706	-.1259	-.0421	-.0060	.0050	.0163
90.000		.6368	.2256	-.2793	-.6128	-.2886	.0305	.2177	.2785		-.4660	-.3799	-.1450	-.1147	-.0595
120.000			.1425	-.3583	-.6501	-.2117	-.0330	.0596	.0217	-.1384	-.4797	-.2516	-.0414	-.0388	.0089
135.000								.0606		.0630		-.2897		-.0386	
150.000			.1190	-.3795	-.6747	-.2134	-.0409	.0682	.1007	.1756	-.1878	-.3474	-.1930	-.1256	-.0236
165.000				-.3797	-.6664	-.2426	-.0620	.0528	.1201	.2246	.1218	-.2912	-.1088	-.0724	.0177
180.000	.9979	.5786	.1273	-.3792	-.6647	-.2599	-.0900	.0351	.1039	.2131	.2324	-.3350	-.1145	-.0928	.0138
270.000		.8578							.2563						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+B12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(11) = 9.990 BETAO (8) = 4.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0349	.0289	-.1609
30.000	.0118	.0210	-.1575
60.000	.0466	.0728	-.0581
90.000	.0559	.1092	
120.000	.1030	.1141	.2497
135.000	.1128	.1254	.0824
150.000	.0797	.0785	.0214
165.000	.1205	.1536	.1897
180.000	.1246	.1605	.1617

ALPHAO(11) = 9.980 BETAO (9) = 6.130

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9643	1.0250	.6465	.1286	-.2473	-.2954	-.2026	.0180	.0670	.0003	-.0264	-.0220	-.0175	-.0102	-.0028
30.000			.4747	-.0329	-.4062	-.4528	-.3561	.0048	.0956	-.0220	-.1008	-.0733	-.0497	-.0485	-.0423
60.000			.2945	-.2100	-.5628	-.5235	.0043	.1468	.3093	-.1318	-.1354	-.0455	-.0099	-.0001	.0084
90.000		.5700	.1689	-.3374	-.6413	-.2213	.0415	.2301	.2922		-.4822	-.4147	-.1530	-.1441	-.0993
120.000			.1010	-.3998	-.6712	-.1796	-.0107	.0875	.0532	-.1372	-.4807	-.2522	-.0547	-.0569	-.0035
135.000								.0841		.0545		-.2950		-.0593	
150.000			.0957	-.3991	-.6816	-.1844	-.0338	.0819	.1218	.1607	-.2494	-.3741	-.2322	-.1441	-.0455
165.000				-.3938	-.6855	-.2269	-.0601	.0550	.1159	.2181	.0970	-.3166	-.1381	-.0998	-.0136
180.000	.9643	.5566	.1152	-.3895	-.6573	-.3085	-.0865	.0255	.0833	.1946	.1958	-.3265	-.1433	-.1234	-.0214
270.000		.8983							.0522						

X/LT	.7460	.8530	.9280
PHI			
.000	.0116	.0070	-.1864
30.000	-.0121	-.0037	-.1785
60.000	.0371	.0627	-.0728
90.000	.0271	.0907	
120.000	.0917	.0964	.2263
135.000	.0914	.1153	.0671
150.000	.0603	.0625	.0020
165.000	.0939	.1348	.2043
180.000	.0895	.1324	.1846

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHAO(11) = 10.030 BETAO (10) = 8.170

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9321	.9829	.6233	.1110	-.2554	-.3105	-.2312	-.0065	.0306	-.0222	-.0477	-.0416	-.0387	-.0337	-.0107
30.000			.4160	-.0889	-.4503	-.5019	-.4313	-.0285	.0645	-.0266	-.1294	-.1020	-.0828	-.0850	-.0627
60.000			.2238	-.2710	-.6114	-.5615	-.0058	.1342	.3075	-.0828	-.1375	-.0533	-.0181	-.0159	-.0016
90.000		.5101	.1120	-.3810	-.6727	-.1938	.0429	.2418	.3004		-.5032	-.4421	-.1829	-.1720	-.1404
120.000			.0603	-.4171	-.6212	-.1544	.0092	.1024	.0823	-.1217	-.4983	-.2461	-.0746	-.0835	-.0348
135.000								.1007		.0550		-.2965		-.0961	
150.000			.0644	-.4360	-.6410	-.1916	-.0312	.0835	.1363	.1547	-.2704	-.3795	-.2439	-.1792	-.0592
165.000				-.4139	-.6766	-.2293	-.0617	.0446	.1077	.1974	.0535	-.3199	-.1621	-.1554	-.0533
180.000	.9321	.4341	.1051	-.3930	-.6758	-.3423	-.0903	.0008	.0530	.1720	.1388	-.3201	-.1869	-.1871	-.0661
270.000		.9450							.2490						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0162	-.0262	-.2190
30.000	-.0444	-.0369	-.2096
60.000	.0231	.0497	-.0886
90.000	-.0059	.0981	
120.000	.0704	.0948	.2058
135.000	.0706	.1046	.0529
150.000	.0418	.0521	-.0196
165.000	.0728	.1087	.1822
180.000	.0566	.0959	.1576

ALPHAO(11) = 10.050 BETAO (11) = 10.230

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.8954	.9418	.5928	.0895	-.2695	-.3420	-.2462	-.0698	-.0115	-.0538	-.0859	-.0848	-.0756	-.0646	-.0622
30.000			.3592	-.1418	-.4961	-.3553	-.4508	-.0735	.0324	-.0394	-.1664	-.1402	-.1212	-.1089	-.1074
60.000			.1552	-.3309	-.6522	-.6128	-.0457	.1317	.3059	-.0678	-.1437	-.0761	-.0275	-.0233	-.0157
90.000		.4534	.0550	-.4297	-.6858	-.1965	-.0384	.2606	.3155		-.5283	-.4472	-.2152	-.2240	-.1812
120.000			.0201	-.4430	-.4573	-.1346	-.0028	.0835	.1153	-.1448	-.5153	-.2230	-.1133	-.1234	-.0551
135.000								.0727		.0385		-.3041		-.1424	
150.000			.0279	-.4494	-.5482	-.1681	-.0477	.0566	.1259	.1296	-.2822	-.4092	-.2449	-.2053	-.0918
165.000				-.4295	-.6948	-.2341	-.0742	.0250	.0851	.1462	.0108	-.3300	-.1952	-.1871	-.0714
180.000	.8954	.3743	.0887	-.4173	-.6786	-.3854	-.1169	-.0218	.0032	.1142	.0895	-.3085	-.2355	-.2447	-.1083
270.000		.9906							.2578						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T31)

ALPHA0(11) = 10.050 BETA0 (11) = 10.230

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L*	.7460	.8530	.9280
PHI			
.000	-.0539	-.0661	-.2564
30.000	-.0763	-.0644	-.2361
60.000	.0067	.0325	-.1043
90.000	-.0315	.0516	
120.000	.0602	.0754	.1868
135.000	.0620	.0933	.0418
150.000	.0268	.0318	-.0484
165.000	.0408	.0744	.1719
180.000	.0072	.0528	.1346

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T32) (17 APR 74)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES
LREF = 38.7090 INCHES YMRP = .0000 INCHES
BREF = 38.7090 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 1.100 ELEVON = .000
RUDDER = .000 SPOBRK = .000

ALPHAO(1) = -10.240 BETAO (1) = -9.900

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0260	.6593	.2899	-.1496	-.4276	-.4782	-.1699	-.1044	.0581	.0063	-.1868	-.3229	-.1383	-.1019	-.0750
30.000			.3890	-.0630	-.3694	-.4355	-.4456	-.1755	-.1416	-.3001	-.3813	-.2328	-.1869	-.1786	-.1039
60.000			.5615	.1003	-.2439	-.3064	-.1329	.0112	-.1339	-.4845	-.5998	-.4146	-.1541	.0222	-.0776
90.000		1.1090	.7612	.2866	-.0856	-.1605	.0069	.4036	.4395		-.3500	-.3839	-.1796	-.0660	-.0799
120.000			.8943	.4189	.0235	-.0536	-.0219	.4500	.5473	.1524	.3507	.2581	.1203	.0094	-.0405
135.000								.4024		.4101		.2295		.0176	
150.000			.9137	.4315	.0401	-.0378	-.0427	.3604	.4372	.5667	.4999	.1914	-.0632	-.1644	-.0938
165.000				.3865	-.0058	-.0833	-.1809	.2625	.3850	.5649	.5610	.1329	-.0761	-.2238	-.1631
180.000	1.0260	1.1700	.7847	.3126	-.0804	-.1346	-.2194	.1956	.3528	.5372	.5073	-.3335	-.0103	-.3018	-.2645
270.000		.6552							.3658						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0472	.0531	-.0443
30.000	-.0936	-.0092	-.0014
60.000	-.0652	-.0653	-.0200
90.000	-.0642	-.6047	
120.000	.1394	-.0976	.7063
135.000	.1458	.0939	.4394
150.000	.0875	.1610	.4600
165.000	.0567	.1646	.5676
180.000	-.0045	.1299	.4230

ALPHAO(1) = -10.220 BETAO (2) = -7.890

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0580	.6847	.3067	-.1355	-.4193	-.4682	-.1541	-.0923	.0545	.0474	-.1510	-.3329	-.1067	-.0710	-.0622
30.000			.3815	-.0758	-.3764	-.4409	-.4371	-.0520	-.0888	-.2160	-.3635	-.2105	-.1601	-.1490	-.1005
60.000			.5300	.0646	-.2764	-.3399	-.2829	.0174	-.1350	-.3552	-.5969	-.3891	-.1823	.0187	-.0617
90.000		1.0680	.7135	.2367	-.1361	-.2113	-.1668	.4057	.4290		-.3637	-.4000	-.1500	-.0721	-.0578
120.000			.8501	.3691	-.0263	-.1041	-.1054	.4460	.5554	.1831	.3219	.2234	.0846	-.0227	-.0810
135.000								.3869		.4182		.1999		-.0148	
150.000			.8937	.4105	.0101	-.0689	-.1839	.3505	.4564	.5642	.3955	.2009	-.0842	-.1797	-.1374

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHA0(1) = -10.220 BETA0 (2) = -7.890

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
165.000				.3778	-.0172	-.0972	-.1960	.2808	.4174	.5826	.5418	.0599	-.1201	-.2019	-.1785
180.000	1.0580	1.1920	.8059	.3247	-.0595	-.1352	-.2213	.2283	.3920	.5621	.5177	-.3819	-.0699	-.3191	-.2313
270.000		.7138							.3871						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0228	.0628	-.0522
30.000	-.0598	.0238	.0017
60.000	-.0381	-.0095	.0144
90.000	.0013	-.4161	
120.000	.1049	-.1255	.6394
135.000	.1123	.0821	.4190
150.000	.0587	.1432	.3773
165.000	.0483	.1418	.5825
180.000	.0053	.1173	.4252

ALPHA0(1) = -10.220 BETA0 (3) = -5.900

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0800	.7077	.3157	-.1289	-.4086	-.4645	-.1647	-.0973	.0550	.0752	-.1431	-.3304	-.1034	-.0432	-.0448
30.000			.3757	-.0819	-.3860	-.4448	-.4428	-.1017	-.0432	-.1696	-.3685	-.1822	-.1597	-.1158	-.0948
60.000			.4949	.0280	-.3024	-.3673	-.3478	.0078	-.0958	-.3717	-.6214	-.3416	-.1189	.0121	-.0583
90.000		1.0280	.6584	.1831	-.1802	-.2558	-.2425	.3962	.4162		-.3698	-.4259	-.1467	-.0836	-.0751
120.000			.6022	.3191	-.0674	-.1453	-.2368	.4077	.5603	.2271	.2910	.1781	.0504	-.0500	-.1309
135.000								.3720		.4248		.1596		-.0528	
150.000			.8638	.3778	-.0217	-.0982	-.2150	.3516	.4721	.5571	.3195	.1506	-.1228	-.2008	-.1656
165.000				.3641	-.0301	-.1113	-.1992	.3385	.4405	.5894	.5201	-.0161	-.1327	-.2272	-.1988
180.000	1.0800	1.2010	.8189	.3273	-.0621	-.1356	-.2256	.2623	.4258	.5768	.5214	-.3520	-.1241	-.3399	-.2512
270.000		.7562							.3872						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0139	.0708	-.0575
30.000	-.0461	.0427	-.0029
60.000	-.0247	.0171	.0310
90.000	.0280	-.0701	
120.000	.0765	-.1291	.6044
135.000	.0809	.0713	.3810
150.000	.0447	.1263	.3275

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(1) = -10.220 BETAO (3) = -5.900

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
165.000	.0455	.1297	.5282
180.000	.0161	.1126	.3629

ALPHAO(1) = -10.230 BETAO (4) = -3.930

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1010	.7232	.3262	-.1326	-.4049	-.4529	-.2824	-.0903	.0467	.0903	-.1210	-.3304	-.0859	-.0324	-.0379
30.000			.3665	-.0905	-.3866	-.4462	-.4467	-.0821	-.0012	-.0951	-.3250	-.1842	.1393	-.0821	-.0851
60.000			.4657	-.0079	-.3246	-.3871	-.4078	-.0057	-.0579	-.3378	-.5946	-.3059	-.1510	.0043	-.0472
90.000		.9889	.6138	.1356	-.2189	-.2900	-.2452	.2929	.4142		-.3632	-.4451	-.1502	-.0846	-.0766
120.000			.7574	.2751	-.1072	-.1855	-.2800	.3457	.5688	.2720	.2682	.1274	.0274	-.0710	-.1580
135.000								.3336		.4332		.1150		-.0903	
150.000			.8404	.3481	-.0494	-.1269	-.2354	.3390	.4843	5625	.2664	.0412	-.1310	-.2304	-.2168
165.000				.3590	-.0382	-.1216	-.2171	.2866	.4662	.5999	.5023	-.0615	-.1073	-.2327	-.2018
180.000	1.1310	1.2100	.8286	.3352	-.0590	-.1333	-.2207	.2413	.4493	.5955	.5327	-.2066	-.1260	-.2211	-.2018
270.000		.8022							.3997						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0049	.0766	-.0593
30.000	-.0331	.0557	-.0061
60.000	-.0116	.0389	.0514
90.000	.0363	-.0024	
120.000	.0581	-.1145	.5315
135.000	.0609	.0575	.3397
150.000	.0281	.1104	.2084
165.000	.0449	.1272	.4503
180.000	.0245	.1102	.3596

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHA0(1) = -10.230 BETA0 (5) = -1.940

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1090	.7337	.3334	-.1245	-.4016	-.4524	-.1699	-.0827	.0706	.1087	-.1109	-.3375	-.0768	-.0242	-.0412
30.000			.3578	-.0968	-.3927	-.4519	-.4606	-.0866	.0608	-.0393	-.3099	-.2004	-.1249	-.0763	-.0743
60.000			.4350	-.0341	-.3497	-.4095	-.4051	.0204	-.0265	-.2846	-.5880	-.2920	-.1790	-.0214	-.0497
90.000		.9455	.5624	.0821	-.2567	-.3262	-.0775	.2497	.4074		-.3756	-.4676	-.1496	-.0986	-.1007
120.000			.7024	.2242	-.1497	-.2268	-.2775	.3754	.5689	.3051	.2397	.0785	-.0088	-.1064	-.1885
135.000								.3466		.4348		.0597		-.1403	
150.000			.7991	.3078	-.0789	-.1563	-.2034	.3517	.4885	.5512	.2345	-.0776	-.1356	-.2773	-.2529
165.000				.3383	-.0562	-.1356	-.2057	.3290	.4691	.5972	.4765	-.1437	-.1080	-.2356	-.2089
180.000	1.1090	1.2060	.8268	.3357	-.0592	-.1356	-.1886	.2932	.4678	.5985	.5312	.0314	-.1182	-.2302	-.2221
270.000		.8489							.3923						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0149	.0821	-.0790
30.000	-.0422	.0795	-.0161
60.000	-.0206	.0769	.0700
90.000	.0152	.0485	
120.000	.0291	-.1019	.4010
135.000	.0278	.0441	.2306
150.000	-.0080	.0746	.2024
165.000	.0178	.1028	.4392
180.000	-.0052	.0909	.3736

ALPHA0(1) = -10.240 BETA0 (6) = .030

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1140	.7362	.3292	-.1218	-.4028	-.4546	-.2315	-.1013	.0653	.1144	-.1046	-.3402	-.0727	-.0179	-.0450
30.000			.3457	-.1104	-.3967	-.4546	-.4679	-.0868	.0825	-.0103	-.2894	-.2218	-.1037	-.0718	-.0742
60.000			.4031	-.0613	-.3686	-.4258	-.4090	.0108	-.0027	-.2706	-.5855	-.2781	-.1880	-.0456	-.0571
90.000		.9005	.5149	.0378	-.2948	-.3613	-.1167	.2558	.3994		-.3833	-.4849	-.1494	-.1073	-.1181
120.000			.6544	.1744	-.1922	-.2646	-.2582	.3047	.5710	.3266	.2152	.0442	-.0282	-.1329	-.2171
135.000								.3106		.4324		.0134		-.1890	
150.000			.7583	.2749	-.1108	-.1851	-.2193	.3239	.4838	.5442	.1849	-.1615	-.1460	-.3190	-.2866
165.000				.3282	-.0689	-.1481	-.2064	.2936	.4693	.5948	.4677	-.1415	-.1270	-.2407	-.2332
180.000	1.1140	1.2080	.8339	.3372	-.0600	-.1364	-.2198	.2561	.4711	.5943	.5398	.0864	-.0897	-.2280	-.2219
270.000		.8925							.3937						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(1) = -10.240 BETAO (6) = .030

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0261	.0782	-.0816
30.000	-.0415	.0716	-.0347
60.000	-.0161	.0975	.0860
90.000	.0093	.0705	
120.000	.0219	-.0150	.2989
135.000	.0098	.0537	.1600
150.000	-.0109	.0475	.1414
165.000	.0054	.0629	.2577
180.000	.0132	.0958	.1963

ALPHAO(1) = -10.250 BETAO (7) = 2.040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.1120	.7367	.3302	-.1233	-.4039	-.4534	-.3761	-.0825	.0793	.1134	-.1125	-.3390	-.0742	-.0200	-.0465
30.000			.3343	-.1225	-.4016	-.4541	-.3700	-.0864	.0979	.0147	-.2772	-.2523	-.0889	-.0635	-.0793
60.000			.3750	-.0843	-.3843	-.4416	-.4127	-.0129	.0284	-.2729	-.5870	-.2801	-.1946	-.0809	-.0617
90.000		.8541	.4652	-.0063	-.3238	-.3886	-.1532	.2254	.4007		-.3949	-.4929	-.1590	-.1121	-.1263
120.000			.5993	.1206	-.2285	-.3001	-.2696	.2185	.5687	.3413	.1889	.0116	-.0409	-.1630	-.2296
135.000								.2510		.4230		-.0363		-.2245	
150.000			.7226	.2380	-.1390	-.2141	-.2378	.2412	.4682	.5226	.1053	-.2216	-.1969	-.3436	-.2790
165.000				.3045	-.0826	-.1631	-.2373	.3014	.4559	.5726	.4403	-.1033	-.0811	-.1987	-.2141
180.000	1.1120	1.2040	.8272	.3317	-.0594	.1371	-.2329	.2291	.4582	.5744	.5215	.0457	-.0822	-.2263	-.2369
270.000		.9444							.3931						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0314	.0811	-.0766
30.000	-.0248	.0796	-.0582
60.000	-.0002	.0876	.0910
90.000	.0065	.0677	
120.000	.0109	.0273	.2435
135.000	-.0057	.0412	.0895
150.000	-.0159	.0291	.0225
165.000	-.0015	.0733	.2410
180.000	.0013	.0867	.1941

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(1) = -10.260 BETAO (8) = 4.030

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0960	.7201	.3231	-.1296	-.4017	-.4582	-.2376	-.1032	.0763	.1122	-.1201	-.3364	-.0912	-.0227	-.0518
30.000			.3149	-.1350	-.4057	-.4585	-.4460	-.0844	.1294	.0327	-.2621	-.2890	-.0893	-.0525	-.0751
60.000			.3426	-.1072	-.3971	-.4503	-.2116	-.0813	.0542	-.2498	-.5877	-.2537	-.1886	-.1041	-.0663
90.000		.8008	.4151	-.0492	-.3538	-.4144	-.0849	.1010	.4217		-.3997	-.5034	-.1645	-.1173	-.1177
120.000			.5418	.0743	-.2647	-.3356	-.4000	.1407	.5767	.3568	.1682	-.0179	-.0686	-.1898	-.2086
135.000								.1679		.4081		-.0829		-.2516	
150.000			.6780	.1982	-.1697	-.2432	-.3403	.1869	.4445	.4763	.0457	-.2410	-.2176	-.3573	-.2543
165.000				.2821	-.0985	-.1735	-.2718	.2018	.4248	.5399	.4166	-.0824	-.0704	-.1790	-.2094
180.000	1.0960	1.1970	.8207	.3313	-.0580	-.1358	-.2280	.2062	.4374	.5566	.5143	-.0104	-.1083	-.2624	-.2272
270.000		.9860							.3976						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0299	.0742	-.0691
30.000	-.0251	.0724	-.0714
60.000	.0019	.0817	.0865
90.000	-.0099	.0343	
120.000	-.0184	.0235	.1684
135.000	-.0389	.0253	.0425
150.000	-.0566	-.0085	-.0251
165.000	-.0209	.0472	.1457
180.000	-.0186	.0598	.1305

ALPHAO(1) = -10.250 BETAO (9) = 6.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0780	.7020	.3108	-.1321	-.4123	-.4631	-.2095	-.1159	.0554	.0807	-.1526	-.3275	-.1182	-.0538	-.0538
30.000			.3016	-.1445	-.4171	-.4636	-.2103	-.0808	.1112	-.0174	-.2617	-.3192	-.0979	-.0535	-.0753
60.000			.3124	-.1308	-.4140	-.4608	-.0966	-.1030	.0860	-.2505	-.5914	-.2400	-.1840	-.1111	-.0763
90.000		.7551	.3761	-.0852	-.3944	-.4401	-.0617	-.1381	.4331		-.4039	-.5183	-.1728	-.1211	-.1187
120.000			.4944	.0340	-.3040	-.3723	-.4344	.0925	.5791	.3647	.1552	-.0437	-.1015	-.2134	-.2021
135.000								.1143		.3934		-.1172		-.2749	
150.000			.6347	.1577	-.2036	-.2715	-.3732	.1153	.4178	.4376	.0100	-.3015	-.2239	-.4107	-.2530
165.000				.2605	-.1176	-.1927	-.2937	.1501	.3885	.5076	.3956	-.0746	-.0954	-.2529	-.2326
180.000	1.0780	1.1550	.8106	.3201	-.0678	-.1432	-.2346	.1922	.3950	.5353	.5035	-.3677	-.1747	-.2790	-.2548
270.000		1.0280							.3973						

X/LT	.7460	.8530	.9280
PHI			

ARC11-71S IA14 OX+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(1) = -10.250 BETAO (9) = 6.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0240	.0613	-.0620
30.000	-.0316	.0605	-.0713
60.000	-.0065	.0809	.751
90.000	-.0505	-.0224	
120.000	-.0629	.0[illegible]	.1439
135.000	-.0802	.0056	.0401
150.000	-.0994	.0320	-.0527
165.000	-.074[illegible]	.0141	.1554
180.000	-.07[illegible]	.0130	.1464

ALPHAO(1) = -10.240 BETAO (10) = 8.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0550	.6746	.2962	-.1438	-.4266	-.4766	-.1722	-.1196	.0415	.0564	-.1694	-.3463	-.1214	-.0739	-.0624
30.000			.2790	-.1550	-.4296	-.4755	-.1266	-.0613	.0343	-.0704	-.2506	-.3383	-.1097	-.0744	-.0888
60.000			.2795	-.1647	-.4285	-.4704	-.1020	-.1134	.0598	-.2590	-.5859	-.2408	-.1624	-.1201	-.0914
90.000		.7029	.3240	-.1211	-.4146	-.4636	-.0850	-.2038	.4303		-.4042	-.5323	-.1684	-.1266	-.1362
120.000			.4401	-.0157	-.3590	-.4055	-.4684	.0317	.5695	.3704	.1439	-.0723	-.1214	-.2355	-.2290
135.000								.0569		.3715		-.1517		-.3134	
150.000			.5869	.1212	-.2335	-.3020	-.4023	.0608	.3853	.3725	-.0388	-.0601	-.2813	-.4785	-.2983
165.000				.2397	-.1327	-.2071	-.3081	.0945	.3401	.4574	.3896	-.0824	-.1642	-.2909	-.2552
180.000	1.0550	1.1200	.6025	.3156	-.0705	-.1447	-.2226	.1727	.3435	.5054	.4957	-.1479	-.2356	-.3093	-.2929
270.000		1.0650							.4074						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0254	.0495	-.0588
30.000	-.0346	.0559	-.0752
60.000	-.0112	.0732	.0710
90.000	-.0922	-.0951	
120.000	-.0961	-.0299	.1368
135.000	-.1155	-.0081	.0285
150.000	-.1340	-.0528	-.0775
165.000	-.1203	-.0131	.1071
180.000	-.1268	-.0326	.0973

ARC11-715 IA14 OL+712+S12N25+AT1 EXTERNAL TANK (RB1T32)

ALPHAO(1) = -10.250 BETAO (11) = 10.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0210	.6432	.2771	-.1587	-.4378	-.4915	-.1655	-.1179	.0404	.0197	-.1947	-.3273	-.1517	-.1083	-.0899
30.000			.2458	-.1837	-.4429	-.4892	-.1128	-.0687	.0172	-.1313	-.2880	-.3572	-.1495	-.0974	-.1058
60.000			.2471	-.1879	-.4452	-.2683	-.1138	-.1261	.0082	-.2558	-.5815	-.2393	-.1537	-.1192	-.1110
90.000		.6532	.2807	-.1564	-.4401	-.3905	-.1086	-.2679	.4243		-.4057	-.5442	-.1765	-.1317	-.1755
120.000			.3837	-.0624	-.3779	-.4414	-.4894	-.0227	.5562	.3581	.1249	-.0941	-.1498	-.2710	-.2775
135.000								.0041		.3381		-.1871		-.3380	
150.000			.5611	.0802	-.2664	-.3512	-.4304	-.0454	.3450	.3325	-.0661	-.3987	-.3518	-.4889	-.3354
165.000				.2121	-.1529	-.2245	-.3247	.0028	.2891	.4084	.3750	-.1299	-.2479	-.3160	-.2933
180.000	1.0210	1.0690	.7856	.3040	-.0750	-.1515	-.1981	.1416	.3019	.4712	.4735	-.2977	-.2594	-.3121	-.3584
270.000		1.0940							.4179						
X/L	.7460	.8530	.9280												
PHI															
.000	-.0385	.0386	-.0542												
30.000	-.0364	.0551	-.0726												
60.000	-.0198	.0737	.0773												
90.000	-.1447	-.1749													
120.000	-.1191	-.0649	.1307												
135.000	-.1403	-.0130	.0126												
150.000	-.1604	-.0678	-.0967												
165.000	-.1627	-.0366	.0714												
180.000	-.1935	-.0788	.0804												

ALPHAO(2) = -8.190 BETAO (1) = -9.970

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0630	.7119	.3387	-.1103	-.4049	-.4554	-.2457	-.1052	.0492	.0136	-.2066	-.2436	-.1325	-.0810	-.0676
30.000			.4481	-.0137	-.3333	-.4005	-.4299	-.1237	-.0807	-.2809	-.4221	-.1825	-.1797	-.1879	-.1087
60.000			.5152	.1470	-.2110	-.2805	-.3048	.0519	-.0380	-.5362	-.6150	-.3723	-.0567	.0350	-.0556
90.000		1.1440	.7872	.3059	-.0802	-.1553	-.1232	.4214	.4839		-.4006	-.3954	-.1343	-.0802	-.0495
120.000			.8806	.4013	-.0030	-.0812	-.0710	.4389	.5072	.0639	.3491	.2502	.1232	.0099	-.0380
135.000								.3879		.3279		.2147		.0168	
150.000			.8773	.3960	-.0091	-.0857	-.1171	.3427	.3849	.5128	.4847	.1570	-.0695	-.1654	-.0990
165.000				.3303	-.0808	-.1344	-.2192	.2455	.3355	.5303	.5399	.1307	-.0743	-.2310	-.1625
180.000	1.0630	1.1420	.7396	.2621	-.1109	-.1843	-.2679	.1571	.3073	.5108	.4945	-.3354	-.0168	-.3106	-.2692
270.000		.8896							.4596						
X/L	.7460	.8530	.9280												
PHI															

ARC11-716 IA14 C1+T12+S12N25+AT1D EXTERNAL TANK (RB1T32)

ALPHAO(2) = -8.190 BETAO (1) = -9.970

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0658	.0640	-.0446
30.000	-.0957	.0314	.0020
60.000	-.0306	.0260	.0142
90.000	.0180	-.4336	
120.000	.1572	-.0750	.7138
135.000	.1574	.1276	.4541
150.000	.0960	.1954	.5025
165.000	.0729	.2039	.5832
180.000	.0123	.1591	.4221

ALPHAO(2) = -8.200 BETAO (2) = -7.960

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.0980	.7581	.3546	-.0929	-.3919	-.4473	-.2734	-.0965	.0482	.0498	-.1773	-.2658	-.1090	-.0544	-.0539
30.000			.4379	-.0290	-.3399	-.4031	-.4344	-.1638	-.0333	-.2185	-.3827	-.1604	-.1585	-.1434	-.0895
60.000			.5780	.1037	-.2419	-.3120	-.3659	.0435	-.0211	-.5050	-.6108	-.3286	-.0971	.0245	-.0476
90.000		1.1010	.7328	.2512	-.1271	-.2016	-.1944	.4183	.4755		-.4138	-.4127	-.1310	-.0652	-.0516
120.000			.8351	.3492	-.0455	-.1240	-.1202	.4434	.5175	.0986	.3052	.2127	.0828	-.0191	-.0830
135.000								.3063		.3478		.1824		-.0081	
150.000			.8529	.3639	-.0319	-.1094	-.2189	.2861	.4156	.5190	.3944	.1758	-.0881	-.1764	-.1393
165.000				.3259	-.0617	-.1412	-.2409	.1879	.3783	.5486	.5286	.0552	-.1238	-.2025	-.1820
180.000	1.0980	1.1800	.7582	.2741	-.1036	-.1804	-.2656	.1576	.3528	.5385	.5039	-.3913	-.0850	-.3184	-.2332
270.000		.7475							.4811						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0347	.0649	-.0445
30.000	-.0441	.0533	.0019
60.000	-.0215	.0602	.0468
90.000	.0408	-.0220	
120.000	.1287	-.0885	.6621
135.000	.1297	.1173	.4438
150.000	.0824	.1859	.4344
165.000	.0640	.1840	.5790
180.000	.0235	.1900	.4186

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1F32)

ALPHAO(2) = -8.210 BETAO (3) = -5.960

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1220	.7635	.3655	-.0939	-.3857	-.4399	-.4988	-.0667	.0655	.0724	-.1480	-.2926	-.0841	-.0298	-.0402
30.000			.4284	-.0391	-.3510	-.4123	-.4690	-.1792	.0145	-.1601	-.3454	-.1540	-.1445	-.1093	-.0888
60.000			.5461	.0670	-.2731	-.3402	-.3860	.0097	.0362	-.4959	-.5970	-.2913	-.1337	.0178	-.0397
90.000		1.0630	.6832	.2004	-.1678	-.2445	-.2574	.4027	.4652		-.4097	-.4322	-.1252	-.0650	-.0617
120.000			.7894	.3048	-.0851	-.1638	-.2112	.3683	.5264	.1218	.2771	.1709	.0508	-.0461	-.1257
135.000								.2720		.3618		.1455		-.0453	
150.000			.8277	.3357	-.0578	-.1339	-.2469	.2347	.4351	.5203	.3005	.1409	-.1213	-.1948	-.1784
165.000				.3134	-.0712	-.1521	-.2521	.1621	.4015	.5574	.5040	- 0245	-.1362	-.2238	-.1971
180.000	1.1220	1.1690	.7680	.2752	-.1020	-.1802	-.2694	.1465	.3733	.5528	.5045	-.3658	-.1244	-.3272	-.2394
270.000		.7922							.4857						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0217	.0750	-.0467
30.000	-.0451	.0612	.0074
60.000	-.0168	.0694	.0627
90.000	.0394	.0265	
120.000	.0977	-.1096	.6296
135.000	.0971	.1046	.4110
150.000	.0589	.1653	.3730
165.000	.0609	.1661	.5322
180.000	.0280	.1411	.3668

ALPHAO(2) = -8.220 BETAO (4) = -1.980

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1490	.7880	.3824	-.0823	-.3777	-.4276	-.4881	-.0769	.0672	.0972	-.1068	-.2929	-.0464	.0061	-.0189
30.000			.4093	-.0575	-.3605	-.4188	-.4821	-.0991	.0845	-.0738	-.2856	-.1664	-.0931	-.0596	-.0589
60.000			.4795	.0015	-.3204	-.3804	-.3918	-.1150	.0585	-.4312	-.5632	-.2371	-.1759	-.0201	-.0261
90.000		.9823	.5888	.1040	-.2440	-.3116	-.3270	.1836	.4744		-.3947	-.4679	-.1103	-.0712	-.0832
120.000			.6969	.2126	-.1578	-.2334	-.3239	.2033	.5484	.2023	.2246	.0746	.0012	-.0968	-.1735
135.000								.2033		.3873		.0533		-.1249	
150.000			.7699	.2742	-.1041	-.1819	-.2915	.1326	.4567	.5118	.2215	-.0803	-.1352	-.2641	-.2464
163.000				.2932	-.0907	-.1713	-.2683	.0244	.4353	.5712	.4647	-.1500	-.1057	-.2324	-.2001
180.000	1.1490	1.1740	.7824	.2851	-.0993	-.1751	-.2691	.0193	.4188	.5725	.5247	-.0136	-.1203	-.2252	-.2190
270.000		.8869							.4833						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(2) = -8.220 BETAO (4) = -1.980

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0307	.0735	-.0595
30.000	-.0525	.0695	-.0064
60.000	-.0176	.0753	.0815
90.000	.0239	.0774	
120.000	.0536	-.0781	.4341
135.000	.0437	.0735	.2513
150.000	.0111	.1028	.2149
165.000	.0325	.1267	.4412
180.000	.0078	.1137	.3732

ALPHAO(2) = -8.150 BETAO (5) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1520	.7912	.3780	-.0847	-.3747	-.4295	-.4891	-.0932	.0694	.1036	-.0999	-.3008	-.0393	.0100	-.0221
30.000			.3950	-.0688	-.3672	-.4270	-.4876	-.0720	.0773	-.0333	-.2603	-.1901	-.0712	-.0362	-.0544
60.000			.4468	-.0299	-.3427	-.4055	-.3938	-.0958	.0674	-.3922	-.5569	-.2205	-.1894	-.0506	-.0319
90.000		.9340	.5369	.0552	-.2828	-.3461	-.2057	.0661	.4830		-.3998	-.4841	-.1094	-.0778	-.1052
120.000			.6449	.1630	-.1972	-.2706	-.3511	.1633	.5562	.2352	.1948	.0365	-.0234	-.1208	-.2046
135.000								.0941		.3916		.0062		-.1730	
150.000			.7321	.2397	-.1348	-.2120	-.3143	-.0741	.4651	.5164	.1742	-.1675	-.1392	-.3034	-.2825
165.000				.2769	-.1068	-.1864	-.2799	-.1948	.4401	.5702	.4458	-.1505	-.1191	-.2337	-.2313
180.000	1.1520	1.1740	.7837	.2832	-.1002	-.1763	-.2737	.0350	.4254	.5651	.5209	.0620	-.0841	-.2148	-.2182
270.000		.9320							.4663						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0384	.0806	-.0724
30.000	-.0519	.0772	-.0285
60.000	-.0150	.0898	.1025
90.000	.0145	.0882	
120.000	.0392	-.0076	.3233
135.000	.0230	.0719	.1728
150.000	.0080	.0711	.1429
165.000	.0208	.0997	.2510
180.000	.0282	.1094	.1930

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(2) = -8.190 BETAO (6) = 2.040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1500	.7884	.3783	-.0812	-.3754	-.4287	-.4922	-.0748	.0865	.1133	-.1015	-.3058	-.0460	.0115	-.0222
30.000			.3806	-.0815	-.3787	-.4320	-.4900	-.0712	.0733	.0089	-.2423	-.2290	-.0598	-.0213	-.0589
60.000			.4179	-.0557	-.3572	-.4161	-.3939	-.0572	.0860	-.3464	-.5607	-.2036	-.1832	-.0829	-.0464
90.000		.8899	.4876	.0097	-.3134	-.3740	-.0671	.0037	.4884		-.4055	-.4955	-.1233	-.0901	-.1150
120.000			.5917	.1115	-.2358	-.3061	-.3890	.1216	.5601	.2607	.1658	.0012	-.0392	-.1508	-.2137
135.000								-.0321		.3890		-.0412		-.2127	
150.000			.6913	.2007	-.1642	-.2401	-.3347	-.1333	.4570	.5017	.0886	-.2285	-.1909	-.3263	-.2677
165.000				.2566	-.1213	-.1987	-.2901	-.1524	.4281	.5445	.4158	-.1059	-.0811	-.1948	-.2088
180.000	1.1500	1.1700	.7796	.2804	-.1004	-.1785	-.2736	.0789	.4083	.5402	.5014	.0220	-.0824	-.2204	-.2321
270.000		.9787							.4504						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0465	.0663	-.0662
30.000	-.0414	.0737	-.0526
60.000	-.0129	.0921	.1009
90.000	.0054	.0816	
120.000	.0199	.0395	.2503
135.000	.0051	.0579	.0964
150.000	-.0034	.0454	.0312
165.000	.0078	.0846	.2322
180.000	.0140	.1007	.1822

ALPHAO(2) = -8.240 BETAO (7) = 4.040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1350	.7727	.3685	-.0894	-.3793	-.4367	-.4976	-.0905	.0882	.1054	-.1284	-.3222	-.0682	-.0095	-.0442
30.000			.3603	-.0945	-.3859	-.4441	-.4948	-.0747	.0875	.0373	-.2543	-.2569	-.0655	-.0319	-.0638
60.000			.3796	-.0837	-.3754	-.4293	-.3823	.0168	.0777	-.2145	-.5358	-.2024	-.1369	-.0907	-.0646
90.000		.8371	.4356	-.0318	-.3456	-.4038	-.0556	-.0087	.4808		-.4175	-.4914	-.1556	-.1104	-.1182
120.000			.5367	.0652	-.2732	-.3413	-.0451	.0769	.5065	.2969	.1453	-.0360	-.0764	-.1910	-.2097
135.000								.0810		.3863		-.0945		-.2497	
150.000			.6508	.1675	-.1951	-.2676	-.3699	.1255	.4140	.4597	.0357	-.2598	-.2203	-.3585	-.2578
165.000				.2391	-.1382	-.2138	-.3108	.1189	.3940	.5135	.3954	-.0979	-.0829	-.1832	-.2138
180.000	1.1350	1.1650	.7750	.2791	-.1020	-.1780	-.2750	.1371	.3953	.5266	.4496	-.0225	-.1089	-.2609	-.2322
270.000		1.0210							.4456						

X/LT	.7460	.8530	.9280
PHI			

ARC11-715 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(2) = -8.240 BETAO (7) = 4.040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7450	.8530	.9280
PHI			
.000	-.0448	.0649	-.0631
30.000	-.0360	.0734	-.0659
60.000	-.0064	.0891	.0826
90.000	-.0136	.0514	
120.000	-.0126	.0367	.1734
135.000	-.0365	.0398	.0490
150.000	-.0495	.0063	-.0233
165.000	-.0155	.0627	.1437
180.000	-.0126	.0759	.1354

ALPHAO(2) = -8.220 BETAO (8) = 6.070

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1170	.7560	.3612	-.0918	-.3854	-.4443	-.5047	-.0971	.0819	.0826	-.1468	-.3046	-.0953	-.0333	-.0514
30.000			.3416	-.1152	-.3964	-.4473	-.4654	-.0662	.0824	.0344	-.2449	-.2849	-.0801	-.0393	-.0545
60.000			.3467	-.1147	-.3930	-.4387	-.1574	-.0422	-.0277	-.1325	-.5588	-.2005	-.1245	-.0980	-.0662
90.000		.7895	.3920	-.0637	-.3686	-.4244	-.0314	-.1100	.5694		-.4131	-.5150	-.1689	-.1088	-.1158
120.000			.4912	.0188	-.3049	-.3721	-.2159	.0372	.5532	.3119	.1292	-.0579	-.1056	-.2083	-.1994
135.000								.0737		.3780		-.1270		-.2708	
150.000			.6042	.1270	-.2258	-.2951	-.3938	.0827	.4021	.4268	.0111	-.3098	-.2360	-.4108	-.2477
165.000				.2142	-.1545	-.2324	-.3274	.0490	.3591	.4779	.3727	-.0816	-.1107	-.2455	-.2340
180.000	1.1170	1.1180	.7595	.2593	-.1096	-.1965	-.2800	.1180	.3498	.5074	.4899	-.3685	-.1835	-.2757	-.2606
270.000		1.0630							.4514						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0370	.0536	-.0571
30.000	-.0308	.0649	-.0698
60.000	-.0127	.0991	.0847
90.000	-.0541	.0000	
120.000	-.0588	.0193	.1609
135.000	-.0779	.0263	.0517
150.000	-.0865	-.0073	-.0506
165.000	-.0632	.0303	.1581
180.000	-.0523	.0362	.1617

DATE 06 JAN 75 TABULATED PRESSURE DATA - IA14A - VOL. 9

ARC11-716 IA14 O4+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(2) = -8.230 BETAO (9) = 8.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0890	.7263	.3443	-.1052	-.3994	-.4532	-.4711	-.1067	.0705	.0496	-.1720	-.2693	-.1147	-.0662	-.0560
30.000			.3100	-.1382	-.4122	-.4621	-.4375	-.0417	.0868	-.0150	-.2856	-.3223	-.1013	-.0564	-.0664
60.000			.3110	-.1429	-.4109	-.4473	-.0923	-.0673	-.0909	-.1309	-.5555	-.2033	-.1109	-.0883	-.0785
90.000		.7358	.3475	-.1031	-.3984	-.3341	-.0557	-.1803	.5748		-.4128	-.5288	-.1601	-.1064	-.1390
120.000			.4378	-.0271	-.3393	-.4088	-.1984	.0039	.5709	.3288	.1212	-.0926	-.1273	-.2334	-.2302
135.000								.0216		.3601		-.1693		-.3133	
150.000			.5633	.0893	-.2572	-.3231	-.4234	.0283	.3714	.3630	-.0127	-.3719	-.2830	-.4769	-.2930
165.000				.1921	-.1733	-.2492	-.3447	.0018	.3101	.4400	.3745	-.0893	-.1601	-.2962	-.2441
180.000	1.0890	1.1050	.7511	.2620	-.1144	-.1951	-.2866	.1022	.2983	.4685	.4829	-.3511	-.0409	-.3138	-.3091
270.000		1.0990							.4592						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0437	.0475	-.0552
30.000	-.0326	.0671	-.0648
60.000	-.0200	.0864	.0925
90.000	-.1034	-.0720	
120.000	-.0861	-.0125	.1588
135.000	-.1040	.0212	.0441
150.000	-.1148	-.0258	-.0635
165.000	-.1075	.0152	.1291
180.000	-.1127	-.0005	.1392

ALPHAO(2) = -8.240 BETAO (10) = 10.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0590	.6963	.3250	-.1258	-.4096	-.4677	-.4277	-.1213	.0422	.0226	-.1952	-.2436	-.1399	-.0863	-.0656
30.000			.2819	-.1591	-.4267	-.4784	-.1905	-.0708	.1039	.0060	-.3106	-.3184	-.1128	-.0665	-.0791
60.000			.2773	-.1661	-.4285	-.2290	-.0986	-.0775	-.1092	-.2070	-.5545	-.2046	-.1052	-.0889	-.0959
90.000		.6891	.3047	-.1410	-.4254	-.1172	-.0744	-.2507	.5616		-.4148	-.5166	-.1559	-.1104	-.1805
120.000			.3891	-.0708	-.3748	-.4427	-.1891	-.0516	.5677	.3270	.1072	-.1173	-.1497	-.2645	-.2794
135.000								-.0276		.3296		-.2041		-.3393	
150.000			.5210	.0492	-.2889	-.3561	-.4517	-.0361	.3373	.3209	-.0550	-.4189	-.3552	-.4898	-.3340
165.000				.1688	-.1927	-.2675	-.3620	-.0526	.2598	.3894	.3658	-.1417	-.2658	-.3194	-.2975
180.000	1.0590	1.0310	.7390	.2541	-.1209	-.1995	-.2839	.0946	.2557	.4348	.4620	-.3004	-.2648	-.3318	-.3736
270.000		1.1320							.4640						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1732)

ALPHAO(2) = -8.240 BETAO (10) = 10.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0639	.0493	-.0599
30.000	-.0378	.0700	-.0628
60.000	-.0244	.0903	.1052
90.000	-.1576	-.1546	
120.000	-.1061	-.0495	.1486
135.000	-.1301	.0161	.0302
150.000	-.1348	-.0355	-.0732
165.000	-.1463	-.0049	.1003
180.000	-.1792	-.0462	.1205

ALPHAO(3) = -6.210 BETAO (1) = -10.020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0900	.7607	.3874	-.0710	-.3744	-.4285	-.4980	-.0862	.0514	.0183	-.2201	-.2350	-.1258	-.0694	-.0649
30.000			.5031	.0365	-.2935	-.3652	-.4076	-.1740	-.0208	-.2502	-.3964	-.1552	-.1592	-.1671	-.0889
60.000			.6648	.1819	-.1794	-.2516	-.2964	.1182	.0473	-.4444	-.5635	-.3134	-.0540	.0488	-.0336
90.000		1.1690	.8052	.3191	-.0691	-.1466	-.1297	.4400	.5211		-.5679	-.3909	-.1025	-.0359	.0348
120.000			.6650	.3819	-.0165	-.0992	-.1088	.4132	.4657	-.0086	.3224	.2521	.1288	.0197	-.0362
135.000								.3444		.2536		.2135		.0252	
150.000			.8386	.3543	-.0412	-.1206	-.1798	.2641	.3360	.4646	.4652	.1486	-.0720	-.1566	-.1013
165.000				.2832	-.0994	-.1753	-.2651	.0046	.2866	.4966	.5222	.1331	-.0807	-.2288	-.1597
180.000	1.0900	1.1100	.6956	.2149	-.1480	-.2216	-.3022	.0572	.2605	.4867	.4794	-.3299	-.0425	-.3048	-.2693
270.000		.7177							.5936						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0714	.0658	-.0460
30.000	-.0824	.0576	-.0037
60.000	-.0055	.0991	.0505
90.000	.0447	-.0337	
120.000	.1690	-.0337	.7265
135.000	.1721	.1851	.4776
150.000	.1192	.2462	.5391
165.000	.0935	.2472	.5954
180.000	.0424	.1945	.4263

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (R81T32)

ALPHAO(3) = -6.220 BETAO (2) = -7.960

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1250	.7893	.3992	-.0612	-.3663	-.4238	-.4884	-.0671	.0614	.0482	-.1820	-.2667	-.1078	-.0494	-.0542
30.000			.4913	.0178	-.3073	-.3741	-.4390	-.3131	.0258	-.1878	-.3504	-.1399	-.1480	-.1300	-.0865
60.000			.6206	.1404	-.2127	-.2825	-.3355	.0936	.0645	-.4407	-.5702	-.2695	-.1121	.0379	-.0287
90.000		1.1270	.7497	.2611	-.1168	-.1932	-.1898	.4326	.5124		-.5161	-.4138	-.1072	-.0453	-.0448
120.000			.8179	.3288	-.0636	-.1433	-.1615	.3816	.4750	.0241	.2821	.2075	.0829	-.0120	-.0836
135.000								.2665		.2782		.1738		-.0020	
150.000			.8154	.3273	-.0679	-.1455	-.2398	.1630	.3670	.4711	.3555	.1481	-.0890	-.1729	-.1375
165.000				.2762	-.1040	-.1811	-.2801	-.0132	.3340	.5124	.5081	.0488	-.1151	-.2036	-.1785
180.000	1.1250	1.1230	.7114	.2247	-.1431	-.2185	-.3016	.0126	.3081	.5155	.4906	-.3948	-.0849	-.3172	-.2312
270.000		.7728							.6166						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0467	.0694	-.0419
30.000	-.0598	.0767	-.0017
60.000	-.0035	.1165	.0733
90.000	.0593	.0515	
120.000	.1377	-.0292	.6575
135.000	.1415	.1688	.4596
150.000	.0997	.2290	.4826
165.000	.0854	.2265	.5874
180.000	.0433	.1812	.4135

ALPHAO(3) = -6.230 BETAO (3) = -5.960

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1520	.8146	.4128	-.0548	-.3593	-.4147	-.4829	-.0744	.0774	.0680	-.1482	-.2973	-.0825	-.0202	-.0404
30.000			.4812	.0017	-.3211	-.3829	-.4536	-.2575	.0736	-.1360	-.3148	-.1482	-.1310	-.0924	-.0802
60.000			.5864	.1010	-.2485	-.3112	-.3409	.0291	.0980	-.4277	-.5642	-.2504	-.1591	.0259	-.0198
90.000		1.0870	.7014	.2099	-.1588	-.2341	-.2427	.4138	.5085		-.4834	-.4368	-.1112	-.0463	-.0551
120.000			.7741	.2816	-.1016	-.1805	-.2115	.3063	.4865	.0532	.2512	.1636	.0498	-.0410	-.1221
135.000								.1809		.3009		.1307		-.0387	
150.000			.7893	.2915	-.0941	-.1679	-.2790	.0968	.3954	.4774	.2818	.1249	-.1215	-.1923	-.1716
165.000				.2646	-.1113	-.1906	-.2890	-.0425	.3618	.5291	.4868	-.0331	-.1372	-.2226	-.1883
180.000	1.1520	1.1310	.7217	.2237	-.1426	-.2184	-.3043	.0111	.3289	.5313	.4947	-.3830	-.1233	-.3229	-.2206
270.000		.8222							.5855						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(3) = -6.230 BETAO (3) = -5.960

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0320	.0726	-.0445
30.000	-.0431	.0724	.0040
60.000	-.0111	.1094	.0778
90.000	.0511	.0977	
120.000	.1056	-.0616	.6349
135.000	.1064	.1442	.4330
150.000	.0772	.2009	.4184
165.000	.0757	.2003	.5353
180.000	.0443	.1702	.3671

ALPHAO(3) = -6.120 BETAO (4) = -1.980

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1790	.8331	.4298	-.0492	-.3526	-.4064	-.4720	-.0606	.0766	.1008	-.1086	-.2889	-.0407	.0203	-.0128
30.000			.4582	-.0176	-.3296	-.3940	-.4635	-.1194	.1085	-.0396	-.2440	-.2002	-.3702	-.0342	-.0500
60.000			.5230	.0337	-.2966	-.3599	-.3559	-.1130	.1449	-.3885	-.5354	-.2159	-.1729	-.0344	-.0123
90.000		1.0090	.6051	.1142	-.2375	-.3072	-.3061	.3179	.5103		-.4838	-.4772	-.1021	-.0564	-.0776
120.000			.6821	.1897	-.1784	-.2488	-.3373	.1655	.5115	.1234	.1988	.0674	.0002	-.0894	-.1721
135.000								.1574		.3419		.0414		-.1122	
150.000			.7309	.2316	-.1400	-.2130	-.3207	.0904	.3998	.4631	.2044	-.0952	-.1351	-.2547	-.2394
165.000				.2429	-.1327	-.2089	-.3046	-.1045	.3800	.5276	.4420	-.1510	-.1096	-.2317	-.1941
180.000	1.1790	1.1380	.7311	.2317	-.1387	-.2156	-.3071	-.0399	.3574	.5324	.5019	-.0625	-.1243	-.2230	-.2135
270.000		.9135							.5502						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0387	.0685	-.0565
30.000	-.0594	.0754	-.0049
60.000	-.0204	.0991	.0820
90.000	.0215	.1078	
120.000	.0559	-.0557	.4729
135.000	.0495	.1035	.2730
150.000	.0157	.1325	.2350
165.000	.0405	.1519	.4464
180.000	.0183	.1320	.3707

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHA0(3) = -6.130 BETA0 (5) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1840	.8451	.4279	-.0514	-.3470	-.4021	-.4719	-.0905	.0865	.1138	-.0989	-.2869	-.0281	.0275	-.0115
30.000			.4413	-.0310	-.3473	-.4067	-.4676	-.1290	.1026	.0118	-.2327	-.1896	-.0511	-.0163	-.0489
60.000			.4863	.0038	-.3155	-.3776	-.3706	-.1666	.1726	-.3626	-.5194	-.1724	-.1450	-.0589	-.0260
90.000		.9649	.5549	.0668	-.2736	-.3377	-.3428	.1400	.5290		-.4387	-.4893	-.1005	-.0684	-.0989
120.000			.6326	.1454	-.2140	-.2836	-.3599	.1293	.4165	.1792	.1751	.0282	-.0171	-.1140	-.1930
135.000								.1158		.3508		-.0062		-.1598	
150.000			.6967	.2015	-.1680	-.2406	-.3428	.0743	.3722	.4599	.1578	-.1760	-.1342	-.2909	-.2739
165.000				.2246	-.1465	-.2232	-.3149	-.1611	.3765	.5266	.4227	-.1557	-.1072	-.2297	-.2168
180.000	1.1840	1.1350	.7330	.2317	-.1460	-.2174	-.3103	-.0184	.3506	.5162	.4974	.0274	-.0689	-.2059	-.2056
270.000		.9603							.5280						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0422	.0809	-.0537
30.000	-.0520	.0799	-.0239
60.000	-.0191	.1039	.0876
90.000	.0165	.1052	
120.000	.0481	-.0049	.3490
135.000	.0351	.0870	.1879
150.000	.0227	.0681	.1519
165.000	.0324	.1141	.2471
180.000	.0375	.1246	.1920

ALPHA0(3) = -6.120 BETA0 (6) = 2.030

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1800	.8433	.4293	-.0418	-.3508	-.4062	-.4729	-.1133	.1055	.1188	-.1054	-.3008	-.0356	.0284	-.0147
30.000			.4247	-.0505	-.3526	-.4098	-.4712	-.0972	.1025	.0484	-.2275	-.2125	-.0459	.0032	-.0381
60.000			.4489	-.0244	-.3341	-.3933	-.3883	-.1623	.1743	-.3279	-.5004	-.1533	-.1231	-.0858	-.0429
90.000		.9180	.5059	.0227	-.3033	-.3650	-.1380	.0528	.5449		-.4330	-.4800	-.1123	-.0868	-.1047
120.000			.5842	.0972	-.2459	-.3135	-.1159	.0862	.3942	.2122	.1459	-.0076	-.0407	-.1475	-.1966
135.000								.0719		.3467		-.0525		-.2028	
150.000			.6601	.1545	-.1948	-.2607	-.3602	.0210	.3805	.4591	.0878	-.2300	-.1887	-.3163	-.2560
165.000				.2074	-.1622	-.2364	-.3257	-.1551	.3587	.5018	.3899	-.1162	-.0814	-.1946	-.1950
180.000	1.1800	1.1300	.7282	.2283	-.1476	-.2190	-.3117	-.0594	.3210	.4979	.4746	-.0093	-.0816	-.2138	-.2204
270.000		1.0080							.5047						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(3) = -6.120 BETAO (6) = 2.030

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0465	.0680	-.0568
30.000	-.0421	.0757	-.0417
60.000	-.0144	.1022	.0882
90.000	.0108	.1040	
120.000	.0317	.0491	.2639
135.000	.0157	.0731	.1035
150.000	.0095	.0609	.0382
165.000	.0180	.1040	.2294
180.000	.0256	.1209	.1748

ALPHAO(3) = -6.110 BETAO (7) = 4.060

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1680	.8295	.4185	-.0419	-.3514	-.4107	-.4769	-.1012	.0975	.1015	-.1270	-.3157	-.0634	.0091	-.0301
30.000			.4027	-.0740	-.3615	-.4204	-.4758	-.0735	.1092	.0630	-.2270	-.2414	-.0493	-.0026	-.0355
60.000			.4109	-.0570	-.3613	-.4085	-.4072	-.1304	.1828	-.3003	-.5046	-.1571	-.1044	-.1016	-.0667
90.000		.8643	.4531	-.0179	-.3307	-.3925	-.0038	.0176	.5424		-.4507	-.4750	-.1284	-.1055	-.1053
120.000			.5290	.0501	-.3847	-.3479	.0090	.0676	.3161	.2467	.1208	-.0383	-.0758	-.1813	-.1849
135.000								.0579		.3520		-.1008		-.2393	
150.000			.6192	.1319	-.2259	-.2927	-.3897	.0592	.3281	.4197	.0208	-.2706	-.2125	-.3498	-.2421
165.000				.1878	-.1770	-.2502	-.3464	.0576	.3335	.4759	.3660	-.1111	-.0885	-.1980	-.2049
180.000	1.1680	1.1280	.7212	.2232	-.1486	-.2225	-.3185	.0224	.3335	.4828	.4673	-.0370	-.1034	-.2509	-.2221
270.000		1.0520							.4934						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0491	.0671	-.0515
30.000	-.0241	.0689	-.0525
60.000	-.0134	.0883	.0815
90.000	-.0044	.0766	
120.000	-.0004	.0556	.1900
135.000	-.0215	.0589	.0629
150.000	-.0357	.0246	-.0111
165.000	-.0028	.0849	.1598
180.000	.0018	.1025	.1529

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHA0(3) = -6.190 BETA0 (8) = 6.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1430	.8066	.4106	-.0580	-.3585	-.4167	-.4822	-.1221	.0944	.0763	-.1466	-.3004	-.0959	-.0226	-.0394
30.000			.3760	-.0816	-.3782	-.4284	-.4847	-.0677	.0951	.0532	-.2248	-.2567	-.0801	-.0193	-.0285
60.000			.3740	-.0839	-.3779	-.4226	-.2427	-.0475	.1211	-.2493	-.4798	-.1628	-.0830	-.0635	-.0568
90.000		.8125	.4072	-.0537	-.3565	-.3935	-.0268	-.0460	.4647		-.4304	-.3990	-.1430	-.1126	-.0960
120.000			.4797	.0094	-.3095	-.3758	.0122	.0227	.3044	.2424	.1167	-.0676	-.1113	-.2053	-.1764
135.000								.0199		.3580		-.1391		-.2634	
150.000			.5737	.0918	-.2451	-.3146	-.4118	.0391	.3179	.3973	.0175	-.3267	-.2372	-.4018	-.2291
165.000				.1681	-.1890	-.2638	-.3589	.0957	.2961	.4396	.3509	-.0918	-.1183	-.2375	-.2181
180.000	1.1430	1.0760	.7097	.2151	-.1501	-.2275	-.3165	.0946	.3035	.4688	.4729	-.3665	-.1849	-.2677	-.2540
270.000		1.0940							.4944						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0455	.0528	-.0484
30.000	-.0236	.0752	-.0623
60.000	-.0239	.0822	.0498
90.000	-.0342	.0429	
120.000	-.0386	.0385	.1728
135.000	-.0570	.0492	.0639
150.000	-.0667	.0146	-.0410
165.000	-.0469	.0544	.1703
180.000	-.0344	.0657	.1846

ALPHA0(3) = -6.190 BETA0 (9) = 8.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1120	.7770	.3919	-.0646	-.3691	-.4275	-.4942	-.1330	.0645	.0254	-.1845	-.2652	-.1230	-.0581	-.0571
30.000			.3454	-.1061	-.3906	-.4414	-.4606	-.0665	.0964	.0417	-.2341	-.2652	-.0704	-.0290	-.0436
60.000			.3403	-.1109	-.3944	-.4384	-.1573	-.0691	.0691	-.1604	-.4499	-.1695	-.0727	-.0514	-.0646
90.000		.7629	.3670	-.0837	-.3843	-.1568	-.0384	-.0795	.4055		-.4353	-.3606	-.1427	-.1117	-.1184
120.000			.4368	-.0267	-.3431	-.4018	-.0282	-.0153	.3074	.2441	.1162	-.1039	-.1319	-.2316	-.2028
135.000								-.0153		.3426		-.1795		-.3059	
150.000			.5391	.0596	-.2772	-.3424	-.4377	.0120	.2914	.3471	.0101	-.3776	-.2797	-.4626	-.2668
165.000				.1470	-.2082	-.2811	-.3756	-.0485	.2642	.4048	.3489	-.0990	-.1758	- 2936	-.2322
180.000	1.1120	1.0360	.7023	.2102	-.1570	-.2318	-.3242	.0107	.2474	.4345	.4656	-.3488	-.2401	-.3133	-.2996
270.000		1.1230							.5013						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 OI+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHA0(3) = -6.190 BETA0 (9) = 8.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0614	.0405	-.0515
30.000	-.0313	.0721	-.0597
60.000	-.0298	.0793	.0388
90.000	-.0663	-.0064	
120.000	-.0614	.0012	.1573
135.000	-.0773	.0426	.0505
150.000	-.0852	-.0067	-.0592
165.000	-.0824	.0411	.1510
180.000	-.0893	.0365	.1790

ALPHA0(3) = -6.170 BETA0 (10) = 10.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	. 940	.4510	.5050	.5580	.6380
PHI															
.000	1.0660	.7484	.3716	-.0848	-.3827	-.4391	-.5077	-.1335	.0230	-.0460	-.2290	-.2273	-.1375	-.0765	-.0745
30.000			.3149	-.1291	-.4087	-.4633	-.3082	-.1555	.0793	.0396	-.2367	-.2414	-.0706	-.0395	-.0657
60.000			.3027	-.1413	-.4120	-.3712	-.0896	-.0658	-.0829	-.0939	-.4215	-.1735	-.0778	-.0578	-.0870
90.000		.7190	.0211	-.1201	-.4087	-.0829	-.0581	-.1169	.3648		-.4258	-.3307	-.1359	-.1142	-.1613
120.000			.3889	-.0705	-.3777	-.4023	-.0589	-.0541	.3261	.3518	.1089	-.1354	-.1545	-.2626	-.2497
135.000								-.0559		.3153		-.2108		-.3367	
150.000			.4938	.0239	-.3078	-.3715	-.4649	-.0336	.2474	.2854	-.0230	-.4295	-.3561	-.4825	-.3117
165.000				.1219	-.2293	-.3006	-.3947	-.0909	.2124	.3498	.3513	-.1545	-.2671	-.3203	-.2866
180.000	1.0860	.9992	.6878	.2002	-.1652	-.2401	-.3315	.0293	.2025	.3898	.4501	-.2983	-.2689	-.3446	-.3688
270.000		1.1610							.5043						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0857	.0415	-.0677
30.000	-.0401	.0739	-.0621
60.000	-.0389	.0814	.0560
90.000	-.1088	-.0628	
120.000	-.0806	-.0266	.1507
135.000	-.0978	.0328	.0366
150.000	-.1052	-.0250	-.0831
165.000	-.1201	.0243	.1344
180.000	-.1359	-.0096	.1568

ARC11-716 IA14 OL+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHA0(4) = -4.240 BETA0 (1) = -10.010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1070	.8052	.4275	-.0391	-.3535	-.4106	-.4653	-.2134	.0281	-.0363	-.2351	-.2126	-.1463	-.0679	-.0747
30.000			.5543	.0731	-.2634	-.3357	-.4030	-.2090	-.0499	-.2297	-.4005	-.1440	-.1520	-.1590	-.0722
60.000			.6966	.2114	-.1590	-.2321	-.2445	.1776	.1230	-.4212	-.5068	-.3146	-.0632	.0565	-.0062
90.000		1.1000	.8103	.3187	-.0724	-.1511	-.1422	.4406	.5417		-.6232	-.3948	-.0976	-.0334	-.0155
120.000			.8321	.3453	-.0523	-.1305	-.1427	.3622	.4055	-.0925	.2633	.2484	.1239	.0146	-.0370
135.000								.2499		.1659		.2029		.0131	
150.000			.7856	.2995	-.0920	-.1671	-.2376	.1389	.2764	.4003	.4103	.1213	-.0857	-.1641	-.1044
165.000				.2260	-.1539	-.2270	-.3178	-.2260	.2379	.4539	.4896	.1175	-.0930	-.2434	-.1602
180.000	1.1070	1.0650	.6390	.1574	-.1980	-.2670	-.3502	-.1699	.2377	.4583	.4547	-.3457	-.0860	-.3262	-.2545
270.000		.7328							.4183						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0864	.0358	-.0715
30.000	-.0776	.0513	-.0293
60.000	.0197	.1447	.0644
90.000	.0800	.0528	
120.000	.1701	.0356	.7412
135.000	.1762	.2328	.4995
150.000	.1324	.2776	.5590
165.000	.1123	.2747	.6030
180.000	.0667	.2190	.4130

ALPHA0(4) = -4.270 BETA0 (2) = -8.020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1440	.8385	.4469	-.0249	-.3410	-.4013	-.4695	-.1944	.0810	.0327	-.1925	-.2428	-.1288	-.0489	-.0556
30.000			.5423	.0639	-.2728	-.3402	-.4165	-.2607	.0628	-.1618	-.3333	-.1255	-.1437	-.1253	-.0608
60.000			.6612	.1746	-.1858	-.2572	-.2817	.1242	.1387	-.3896	-.5152	-.2506	-.1095	.0403	-.0122
90.000		1.1410	.7583	.2659	-.1128	-.1921	-.1938	.4471	.5425		-.5824	-.4119	-.0942	-.0356	-.0283
120.000			.7902	.2984	-.0871	-.1564	-.1980	.3141	.4225	-.0561	.2186	.2054	.0859	-.0122	-.0720
135.000								.1054		.2070		.1634		-.0042	
150.000			.7649	.2746	-.1082	-.1865	-.2774	-.0462	.3173	.4193	.3027	.1236	-.0880	-.1718	-.1291
165.000				.2233	-.1520	-.2249	-.3211	-.2303	.2875	.4753	.4786	.0409	-.1106	-.2051	-.1652
180.000	1.1440	1.0775	.6559	.1666	-.1868	-.2577	-.3403	-.0670	.2640	.4871	.4684	-.4047	-.0776	-.3150	-.2135
270.000		.7872							.5370						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O4+T12+S12N25+AT10 EXTERNAL TANK (R81T32)

ALPHA0(4) = -4.270 BETA0 (2) = -8.020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	-.0586	.0583	-.0904
30.000	-.0514	.0770	-.0197
60.000	.0100	.1488	.0788
90.000	.0742	.1231	
120.000	.1373	.0542	.6560
135.000	.1439	.2248	.4724
150.000	.1110	.2691	.5185
165.000	.1043	.2616	.5982
180.000	.0668	.2112	.4069

ALPHA0(4) = -4.290 BETA0 (3) = -5.970

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1730	.8670	.4619	-.0146	-.3297	-.3901	-.4618	-.1553	.1026	.0716	-.1547	-.2761	-.0930	-.0131	-.0357
30.000			.5313	.0440	-.2858	-.3529	-.4253	-.2679	.1155	-.1031	-.2835	-.1347	-.1262	-.0852	-.0687
60.000			.6203	.1342	-.2215	-.2384	-.3039	.0754	.1706	-.3719	-.5161	-.2097	-.1594	.0224	-.0082
90.000		1.1050	.7097	.2149	-.1595	-.2317	-.2394	.4284	.5643		-.5570	-.4335	-.0956	-.0359	-.0439
120.000			.7476	.2559	-.1262	-.2022	-.2399	.2122	.4417	-.0213	.1862	.1635	.0560	-.0372	-.1114
135.000								-.0356		.1386		.1217		-.0336	
150.000			.7417	.2462	-.1338	-.2085	-.3091	-.1231	.3494	.4297	.2445	.1055	-.1192	-.1871	-.1605
165.000				.2172	-.1603	-.2335	-.3268	-.1632	.3181	.4882	.4615	-.0391	-.1160	-.2199	-.1693
180.000	1.1730	1.0900	.6684	.1715	-.1871	-.2593	-.3402	-.0231	.2750	.4964	.4789	-.4047	-.1158	-.3088	-.1902
270.000		.8426							.6044						

X/LT	.7480	.8930	.9280
PHI			
.000	-.0434	.0894	-.3447
30.000	-.0406	.0836	-.0058
60.000	-.0058	.1399	.0761
90.000	.0522	.1456	
120.000	.0987	.0034	.6211
135.000	.1059	.1932	.4443
150.000	.0856	.2386	.4530
165.000	.0895	.2344	.5442
180.000	.0617	.1955	.3696

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(4) = -4.250 BETAO (4) = -3.970

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1890	.8616	.4749	-.0077	-.3247	-.3809	-.4522	-.0759	.1021	.0936	-.1257	-.2820	-.0618	.0151	-.0196
30.000			.5197	.0297	-.2922	-.3565	-.4294	-.2478	.1367	-.0488	-.2450	-.1696	-.0909	-.0559	-.0583
60.000			.5896	.0986	-.2472	-.3130	-.3329	-.0505	.1944	-.3503	-.5003	-.1833	-.1642	-.0020	-.0045
90.000		1.0670	.6617	.1646	-.1948	-.2650	-.2812	.3780	.5448		-.5343	-.4551	-.1036	-.0405	-.0519
120.000			.7080	.2118	-.1592	-.2330	-.2915	.1293	.4535	.0109	.1584	.1124	.0362	-.0604	-.1354
135.000								.0344		.2605		.0824		-.0656	
150.000			.7180	.2187	-.1532	-.2236	-.3298	-.0801	.3652	.4392	.1592	.0304	-.1295	-.2098	-.1933
165.000				.2013	-.1648	-.2375	-.3355	-.1529	.3221	.4950	.4406	-.1035	-.1196	-.2245	-.1832
180.000	1.1890	1.0940	.6760	.1778	-.1852	-.2551	-.8419	-.0216	.2885	.4934	.4811	-.2805	-.1336	-.2261	-.1729
270.000		.8875							.3950						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0434	.0713	-.0455
30.000	-.0473	.0827	.0027
60.000	-.0179	.1306	.0576
90.000	.0317	.1437	
120.000	.0779	-.0222	.5992
135.000	.0787	.1576	.3978
150.000	.0590	.2027	.3921
165.000	.0724	.2134	.4460
180.000	.0492	.1943	.3509

ALPHAO(4) = -4.240 BETAO (5) = -1.960

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1990	.8921	.4763	.0018	-.3235	-.3806	-.4512	-.1945	.1179	.1247	-.1129	-.2764	-.0421	.0320	-.0084
30.000			.5057	.0197	-.3047	-.3704	-.4402	-.2292	.1343	.0041	-.2179	-.2050	-.0683	-.0159	-.0486
60.000			.5564	.0596	-.2708	-.3370	-.3471	-.0804	.2180	-.3281	-.4870	-.1498	-.1320	-.0471	-.0112
90.000		1.0250	.6135	.1173	-.2328	-.3021	-.2990	.2873	.5466		-.5347	-.4755	-.0913	-.0553	-.0713
120.000			.6612	.1690	-.1966	-.2680	-.3466	.1364	.4737	.0418	.1373	.0648	.0128	-.0825	-.1618
135.000								.0869		.2837		.0271		-.1018	
150.000			.6919	.1920	-.1785	-.2455	-.3486	.0173	.3545	.4397	.1409	-.1017	-.1203	-.2389	-.2319
165.000				.1908	-.1739	-.2499	-.3396	-.0310	.3230	.4845	.4145	-.1540	-.1043	-.2277	-.1872
180.000	1.1990	1.0930	.6814	.1785	-.1824	-.2562	-.3432	.0139	.3011	[illegible]	.4735	-.0709	-.0864	-.2091	-.2019
270.000		.9344							.5864						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(4) = -4.240 BETAO (5) = -1.960

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0452	.0864	-.0507
30.000	-.0636	.0921	-.0045
60.000	-.0292	.1302	.0705
90.000	.0142	.1330	
120.000	.0561	-.0055	.4792
135.000	.0468	.1385	.2945
150.000	.0236	.1619	.2544
165.000	.0481	.1781	.4583
180.000	.0264	.1537	.3741

ALPHAO(4) = -4.220 BETAO (6) = .020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2020	.8917	.4763	.0037	-.3177	-.3840	-.4507	-.2530	.1202	.1295	-.0976	-.2671	-.0381	.0365	-.0024
30.000			.4847	.0090	-.3177	-.3818	-.4484	-.2064	.1177	.0437	-.1949	-.2550	-.0513	.0102	-.0360
60.000			.5167	.0251	-.2960	-.3573	-.3954	-.0671	.2418	-.3021	-.4807	-.1328	-.0904	-.0694	-.0259
90.000		.9776	.5627	.0762	-.2643	-.3337	-.3162	.1897	.5525		-.5454	-.4949	-.0989	-.0657	-.0822
120.000			.6161	.1271	-.2274	-.2981	-.3800	.0994	.4920	.0798	.1124	.0207	-.0088	-.1057	-.1805
135.000								.1089		.3113		-.0224		-.1413	
150.000			.6605	.1639	-.1981	-.2665	-.3687	.0964	.3124	.4125	.1290	-.1659	-.1240	-.2664	-.2600
165.000				.1783	-.1819	-.2592	-.3484	-.0604	.3162	.4566	.3897	-.1473	-.0999	-.2109	-.2032
180.000	1.2020	1.0920	.6827	.1837	-.1816	-.2526	-.3453	.0297	.2729	.4568	.4673	-.0142	-.0712	-.1844	-.1895
270.000		.9804							.5503						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0489	.0985	-.0404
30.000	-.0613	.0880	-.0254
60.000	-.0270	.1217	.0690
90.000	.0159	.1253	
120.000	.0512	.0404	.3595
135.000	.0387	.1155	.2027
150.000	.0263	.1152	.1677
165.000	.0409	.1371	.2320
180.000	.0476	.1428	.1932

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHA0(4) = -4.290 BETA0 (7) = 2.020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0050	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1970	.8904	.4748	.0019	-.3260	-.3865	-.4505	-.3187	.1363	.1230	-.1066	-.2739	-.0487	.0344	-.0075
30.000			.4666	-.0097	-.3252	-.3911	-.4505	-.0786	.1068	.0807	-.1991	-.2902	-.0405	.0185	-.0231
60.000			.4771	-.0002	-.3252	-.3797	-.4467	-.0519	.2581	-.2707	-.4762	-.1331	-.0721	-.0791	-.0533
90.000		.9372	.5161	.0313	-.2931	-.3608	-.3478	.2588	.5666		-.4390	-.5143	-.1350	-.0796	-.0894
120.000			.5709	.0802	-.2572	-.3249	-.3730	.0791	.3378	.1394	.0924	-.0124	-.0322	-.1345	-.1860
135.000								.0999		.3057		-.0614		-.1817	
150.000			.6263	.1322	-.2200	-.2880	-.3886	.0904	.2960	.3880	.0604	-.2268	-.1783	-.2893	-.2446
165.000				.1638	-.1961	-.2694	-.3565	-.0012	.3109	.4517	.3637	-.1240	-.0793	-.1869	-.1857
180.000	1.1970	1.0940	.6803	.1817	-.1890	-.2551	-.3439	.0296	.2804	.4571	.4517	-.0306	-.0786	-.2029	-.2054
270.000		1.0270							.5359						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0526	.0821	-.0459
30.000	-.0438	.0875	-.0327
60.000	-.0219	.1165	.0761
90.000	.0152	.1227	
120.000	.0357	.0664	.2781
135.000	.0229	.0952	.1214
150.000	.0180	.0805	.0527
165.000	.0278	.1211	.2384
180.000	.0332	.1412	.1823

ALPHA0(4) = -4.310 BETA0 (8) = 4.040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1810	.8718	.4655	-.0090	-.3225	-.3847	-.4566	-.3775	.1178	.1155	-.1227	-.2894	-.0707	.0204	-.0225
30.000			.4392	-.0379	-.3448	-.3987	-.4634	-.0766	.1102	.0964	-.2182	-.2840	-.0442	.0130	-.0240
60.000			.4354	-.0379	-.3441	-.3931	-.4730	-.0479	.2851	-.2298	-.4687	-.1353	-.0638	-.0581	-.0750
90.000		.8792	.4659	-.0067	-.3237	-.3847	-.3050	.0029	.5881		-.4700	-.4831	-.1369	-.0911	-.0922
120.000			.5205	.0364	-.2900	-.3527	-.0096	.0676	.1839	.1963	.0876	-.0387	-.0666	-.1041	-.1727
135.000								.0802		.2960		-.1004		-.2167	
150.000			.5915	.0985	-.2437	-.3118	-.3353	.0751	.2349	.3501	.0007	-.2727	-.2050	-.3322	-.2330
165.000				.1524	-.2079	-.2783	-.3723	.0781	.2661	.4226	.3436	-.1169	-.0852	-.2041	-.1905
180.000	1.1810	1.0890	.6765	.1808	-.1848	-.2542	-.3461	.0282	.2817	.4343	.4497	-.0743	-.0868	-.2435	-.2072
270.000		1.0680							.5285						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(4) = -4.310 BETAO (8) = 4.040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7430	.8530	.9280
PHI			
.000	-.0511	.0672	-.0406
30.000	-.0187	.0813	-.0377
60.000	-.0184	.0949	.0681
90.000	.0120	.1034	
120.000	.0131	.0752	.2091
135.000	-.0087	.0831	.0781
150.000	-.0163	.0497	.0078
165.000	.0122	.1061	.1698
180.000	.0163	.1274	.1685

ALPHAO(4) = -4.220 BETAO (9) = 8.060

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1300	.8241	.4381	-.0312	-.3412	-.4047	-.4756	-.3990	.0675	.0257	-.1923	-.2491	-.1529	-.0500	-.0579
30.000			.3801	-.0757	-.3742	-.4337	-.4726	-.1258	.1219	.0716	-.2288	-.2797	-.0674	-.0104	-.0290
60.000			.3633	-.0939	-.3767	-.4362	-.2906	-.0821	.2088	-.1677	-.4219	-.1656	-.0635	-.0281	-.0551
90.000		.7826	.3763	-.0757	-.3757	-.4138	-.0377	-.0287	.3891		-.4728	-.3243	-.1683	-.1117	-.1089
120.000			.4259	-.0381	-.3513	-.4085	.0026	-.0001	.1230	.1828	.0800	-.1194	-.1457	-.2234	-.1894
135.000								-.0142		.3152		-.1970		-.2945	
150.000			.5066	.0281	-.2990	-.3637	-.1410	-.0193	.1951	.3175	-.0047	-.3971	-.2829	-.4510	-.2479
165.000				.1054	-.2430	-.3134	-.4041	.0243	.2125	.3679	.3129	-.1189	-.1813	-.2901	-.2267
180.000	1.1300	.9904	.6500	.1588	-.1976	-.2732	-.3609	-.0219	.2148	.3848	.4326	-.3611	-.2466	-.3240	-.2789
270.000		1.1400							.5272						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0710	.0424	-.0594
30.000	-.0410	.0749	-.0565
60.000	-.0376	.0824	.0346
90.000	-.0500	.0344	
120.000	-.0360	.0264	.1756
135.000	-.0500	.0633	.0648
150.000	-.0611	.0190	-.0508
165.000	-.0583	.0588	.1689
180.000	-.0694	.0604	.1991

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(4) = -4.210 BETAO (10) = 10.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1000	.7929	.4176	-.0437	-.3560	-.4159	-.4882	-.3736	.0109	-.0425	-.2289	-.2162	-.1637	-.0845	-.0764
30.000			.3487	-.1008	-.4011	-.4557	-.4826	-.1041	.0504	.0320	-.2354	-.2470	-.0671	-.0156	-.0524
60.000			.3271	-.1230	-.4042	-.4557	-.0994	-.0603	.0122	-.1453	-.3690	-.1673	-.0617	-.0358	-.0764
90.000		.7344	.3350	-.1220	-.4049	-.1908	-.0585	-.0742	.3240		-.4560	-.3088	-.1561	-.1117	-.1425
120.000			.3051	-.0716	-.3838	-.2996	-.0220	-.0371	.1236	.2036	.0883	-.1559	-.1685	-.2555	-.2586
135.000								-.0549		.2892		-.2327		-.3273	
150.000			.4697	-.0022	-.3316	-.3940	-.1478	-.0502	.1742	.2487	-.0263	-.4488	-.3583	-.4719	-.2859
165.000				.0815	-.2646	-.3355	-.4267	.0009	.1407	.3079	.3176	-.1691	-.2753	-.3294	-.2699
180.000	1.1000	.9678	.6398	.1481	-.2070	-.2794	-.3713	-.0081	.1686	.3436	.4172	-.3021	-.2815	-.3640	-.3491
270.000		1.1740							.5298						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0931	.0291	-.0742
30.000	-.0454	.0726	-.0615
60.000	-.0477	.0831	.0468
90.000	-.0735	-.0039	
120.000	-.0541	.0061	.1577
135.000	-.0647	.0561	.0445
150.000	-.0729	.0020	-.0778
165.000	-.0923	.0440	.1588
180.000	-.1260	.0177	.1719

ALPHAO(5) = -2.920 BETAO (1) = -10.000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1130	.8322	.4586	-.0093	-.3313	-.3906	-.4575	-.3919	.0514	-.0201	-.2174	-.2030	-.1835	-.0797	-.0785
30.000			.5866	.1116	-.2380	-.3153	-.3914	-.2159	-.0259	-.1953	-.3654	-.1281	-.1452	-.1491	-.0683
60.000			.7213	.2351	-.1398	-.2152	-.2221	.2094	.1684	-.3820	-.4370	-.2797	-.0677	.0909	-.0004
90.000		1.1830	.8128	.3227	-.0678	-.1478	-.1415	.4443	.5542		-.5821	-.3774	-.0917	-.0311	-.0145
120.000			.8154	.3255	-.0652	-.1447	-.1610	.3233	.3699	-.1405	.1863	.2637	.1317	.0208	-.0212
135.000								.1846		.1016		.2041		.0188	
150.000			.7556	.2692	-.1125	-.1906	-.2680	.0622	.2397	.3575	.3695	.1105	-.0785	-.1606	-.0931
165.000				.1[illegible]	-.1787	-.2509	-.3385	-.2433	.2029	.4263	.4728	.1128	-.0819	-.2371	-.1436
180.000	1.1130	1.0370	.6091	.1280	-.2199	-.2906	-.3683	-.2227	.2029	.4421	.4444	-.3459	-.0925	-.3213	-.2303
270.000		.7406							.5180						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(5) = -2.920 BETAO (1) = -10.000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0792	.0357	-.0719
30.000	-.0614	.0598	-.0356
60.000	.0349	.1744	.0783
90.000	.0935	.0996	
120.000	.1791	.0837	.7648
135.000	.1845	.2659	.5178
150.000	.1444	.2990	.5780
165.000	.1279	.2908	.6147
180.000	.0860	.2297	.4168

ALPHAO(5) = -2.930 BETAO (2) = -8.000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1510	.8671	.4782	.0005	-.3247	-.3869	-.4526	-.3674	.0982	.0349	-.1818	-.2256	-.1522	-.0536	-.0562
30.000			.5747	.0867	-.2531	-.3229	-.4006	-.2235	.0898	-.1342	-.3126	-.1214	-.1394	-.1223	-.0683
60.000			.6868	.1932	-.1726	-.2451	-.2594	.1344	.1834	-.3575	-.4639	-.2043	-.1233	.0324	-.0040
90.000		1.1510	.7629	.2671	-.1125	-.1901	-.2014	.4493	.5542		-.5554	-.4018	-.0958	-.0343	-.0212
120.000			.7749	.2820	-.1023	-.1009	-.2186	.2490	.3903	-.1063	.1423	.2104	.0924	-.0081	-.0561
135.000								-.0069		.1572		.1525		-.0047	
150.000			.7380	.2449	-.1351	-.2107	-.3015	-.1611	.2861	.3865	.2712	.1068	-.0803	-.1703	-.1149
165.000				.1881	-.1810	-.2523	-.3456	-.2576	.2556	.4484	.4586	.0345	-.0883	-.2088	-.1493
180.000	1.1510	1.0510	.6254	.1376	-.2128	-.2859	-.3638	-.0531	.2243	.4650	.4576	-.4116	-.0751	-.3113	-.1886
270.000		.7972							.6195						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0576	.0597	-.0533
30.000	-.0408	.0803	-.0238
60.000	.0175	.1670	.0838
90.000	.0781	.1451	
120.000	.1399	.1008	.5689
135.000	.1476	.2547	.4807
150.000	.1201	.2848	.5363
165.000	.1165	.2766	.6074
180.000	.0790	.2269	.4105

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(5) = -2.930 BETAO (3) = -5.970

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1810	.8977	.4920	.0100	-.3115	-.3736	-.4447	-.3460	.1240	.0757	-.1453	-.2556	-.1122	-.0089	-.0377
30.000			.5665	.0774	-.2628	-.3313	-.4083	-.2699	.1309	-.0777	-.2656	-.1345	-.1134	-.0875	-.0641
60.000			.6530	.1572	-.2014	-.2697	-.2948	.0369	.2132	-.3341	-.4756	-.1648	-.1606	.0155	.0032
90.000		1.1140	.7174	.2212	-.1525	-.2281	-.2398	.4339	.5597		-.5324	-.4185	-.1002	-.0377	-.0323
120.000			.7346	.2422	-.1398	-.2126	-.2624	.1468	.4099	-.0715	.1227	.1720	.0686	-.0282	-.0899
135.000								-.1035		.1970		.1160		-.0256	
150.000			.7162	.2184	-.1558	-.2279	-.3195	-.2310	.3191	.4004	.2202	.0778	-.0994	-.1774	-.1377
165.000				.1808	-.1861	-.2556	-.3478	-.2343	.2889	.4609	.4478	-.0435	-.1196	-.2102	-.1465
180.000	1.1810	1.0590	.6347	.1431	-.2103	-.2791	-.3606	-.0315	.2404	.4722	.4681	-.4255	-.1030	-.3025	-.1615
270.000		.8503							.6318						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0467	.0723	-.0410
30.000	-.0333	.0929	-.0067
60.000	.0012	.1560	.0788
90.000	.0544	.1629	
120.000	.1053	.0661	.6250
135.000	.1119	.2291	.4560
150.000	.0931	.2637	.4779
165.000	.1006	.2586	.5642
180.000	.0738	.2174	.3813

ALPHAO(5) = -2.910 BETAO (4) = -3.960

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1980	.9127	.5058	.0171	-.3034	-.3659	-.4336	-.2804	.1234	.1092	-.1188	-.2597	-.0772	.0218	-.0109
30.000			.5498	.0593	-.2726	-.3407	-.4163	-.2878	.1442	-.0209	-.2226	-.1642	-.0807	-.0419	-.0490
60.000			.6119	.1155	-.2319	-.2982	-.3271	-.0414	.2364	-.3086	-.4621	-.1393	-.1545	-.0146	.0073
90.000		1.0750	.6675	.1715	-.1929	-.2644	-.2745	.3470	.5642		-.5175	-.4398	-.1006	-.0399	-.0373
120.000			.6933	.1989	-.1734	-.2471	-.2868	.0684	.4259	-.0319	.1020	.1220	.0469	-.0484	-.1180
135.000								-.1049		.2275		.0838		-.0536	
150.000			.6910	.1978	-.1744	-.2471	-.3459	-.1702	.3448	.4119	.1450	.0206	-.1164	-.1950	-.1735
165.000				.1743	-.1896	-.2638	-.3538	-.1414	.2910	.4686	.4253	-.1129	-.1006	-.2128	-.1621
180.000	1.1980	1.0660	.6450	.1469	-.2087	-.2801	-.3592	-.0079	.2549	.4535	.4671	-.2892	-.1195	-.2141	-.1570
270.000		.8984							.6181						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(5) = -2.910 BETAO (4) = -3.960

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0431	.0751	-.0403
30.000	-.0475	.0957	.0056
60.000	-.0151	.1417	.0653
90.000	.0331	.1549	
120.000	.0816	.0144	.6050
135.000	.0847	.1891	.4065
150.000	.0710	.2256	.4137
165.000	.0815	.2313	.4536
180.000	.0612	.2019	.3499

ALPHAO(5) = -2.910 BETAO (5) = -2.000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2090	.9226	.5071	.0225	-.3037	-.3630	-.4302	-.3782	.1415	.1395	-.1030	-.2547	-.0490	.0397	.0015
30.000			.5353	.0463	-.2871	-.3508	-.4238	-.3553	.1445	.0276	-.2011	-.2120	-.0665	-.0005	-.0373
60.000			.5762	.0757	-.2551	-.3192	-.4078	-.0385	.2527	-.2837	-.4416	-.1160	-.1071	-.0582	-.0011
90.000		1.0340	.6204	.1229	-.2276	-.2981	-.3006	.2505	.5664		-.5144	-.4654	-.1084	-.0535	-.0577
120.000			.6491	.1537	-.2054	-.2780	-.3225	.0554	.4395	-.0014	.0856	.0714	.0289	-.0688	-.1430
135.000								.0097		.2425		.0224		-.0827	
150.000			.6665	.1652	-.1983	-.2650	-.3638	-.0205	.3275	.4212	.0879	-.1106	-.1027	-.2169	-.2099
165.000				.1616	-.1973	-.2703	-.3592	-.0865	.2775	.4568	.3922	-.1631	-.0911	-.2112	-.1665
180.000	1.2090	1.0660	.6480	.1542	-.2070	-.2790	-.3625	.0010	.2517	.4327	.4514	-.1080	-.0750	-.1901	-.1786
270.000		.9425							.5772						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0488	.0859	-.0398
30.000	-.0609	.0949	-.0012
60.000	-.0243	.1340	.0639
90.000	.0195	.1405	
120.000	.0636	.0206	.5107
135.000	.0559	.1616	.3158
150.000	.0312	.1850	.2854
165.000	.0589	.2005	.4580
180.000	.0394	.1717	.3695

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (R81T32)

ALPHA0(5) = -2.910 BETA0 (6) = .020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2110	.9214	.5055	.0222	-.3010	-.3680	-.4419	-.3724	.1365	.1325	-.0984	-.2516	-.0414	.0406	.0014
30.000			.5111	.0296	-.3020	-.3647	-.4363	-.2850	.1280	.0655	-.1926	-.2547	-.0445	.0175	-.0259
60.000			.5342	.0394	-.2682	-.3456	-.4350	-.0179	.2591	-.2613	-.4392	-.1025	-.0686	-.0707	-.0261
90.000		.9872	.5692	.0736	-.2640	-.3318	-.3149	.1573	.5689		-.5263	-.4882	-.0989	-.0649	-.0734
120.000			.6053	.1108	-.2395	-.3085	-.3988	.0854	.4910	.0308	.0781	.0223	-.0020	-.0974	-.1678
135.000								.0772		.2708		-.0313		-.1311	
150.000			.6363	.1377	-.2184	-.2841	-.3847	.0792	.2820	.4057	.1009	-.1497	-.1116	-.2515	-.2520
165.000				.1507	-.2041	-.2816	-.3693	-.0256	.2820	.4288	.3644	-.1463	-.0958	-.2016	-.1905
180.000	1.2110	1.0670	.6501	.1515	-.2069	-.2793	-.3680	-.0017	.2497	.4360	.4417	-.0427	-.0696	-.1729	-.1778
270.000		.9908							.5630						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0506	.0931	-.0325
30.000	-.0623	.0906	-.0220
60.000	-.0292	.1264	.0617
90.000	.0176	.1346	
120.000	.0581	.0687	.3574
135.000	.0458	.1331	.2049
150.000	.0300	.1307	.1769
165.000	.0476	.1498	.2304
180.000	.0543	.1550	.1928

ALPHA0(5) = -2.910 BETA0 (7) = 2.050

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2040	.9192	.5042	.0264	-.3075	-.3693	-.4369	-.3744	.1532	.1215	-.1054	-.2570	-.0573	.0357	-.0022
30.000			.4950	.0184	-.3078	-.3777	-.4448	-.0877	.0981	.0935	-.1868	-.2987	-.0382	.0229	-.0171
60.000			.4950	.0161	-.3121	-.3683	-.4492	-.0130	.2807	-.2326	-.4328	-.1013	-.0478	-.0535	-.0568
90.000		.9399	.5193	.0348	-.2961	-.3609	-.3319	.0788	.5800		-.5407	-.5066	-.1185	-.0803	-.0797
120.000			.5572	.0663	-.2701	-.3360	-.4137	.0606	.4705	.0612	.0558	-.0230	-.0258	-.1252	-.1798
135.000								.0760		.2967		-.0780		-.1673	
150.000			.5997	.1044	-.2398	-.3069	-.4047	.0796	.2682	.3731	.0453	-.2194	-.1706	-.2763	-.2343
165.000				.1329	-.2184	-.2939	-.3800	.0396	.2723	.4175	.3438	-.1329	-.0776	-.1769	-.1751
180.000	1.2040	1.0620	.6440	.1447	-.2115	-.2822	-.3674	-.0015	.2518	.4298	.4293	-.0522	-.0675	-.1923	-.1917
270.000		1.0329							.5581						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHA0(5) = -2.910 BETA0 (7) = 2.050

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L	.7460	.8530	.9280
PHI			
.000	-.0550	.0865	-.0400
30.000	-.0519	.0913	-.0294
60.000	-.0361	.1150	.0546
90.000	.0158	.1259	
120.000	.0404	.0888	.2812
135.000	.0304	.1088	.1272
150.000	.0260	.0991	.0597
165.000	.0321	.1341	.2400
180.000	.0399	.1548	.1872

ALPHA0(5) = -2.920 BETA0 (8) = 4.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L	.0000	.0080	.0490	.1135	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1900	.9041	.4967	.0114	-.3041	-.3673	-.4445	-.3837	.1379	.1207	-.1178	-.2633	-.0956	.0244	-.0141
30.000			.4609	-.0110	-.3322	-.3859	-.4529	-.0739	.1384	.0817	-.1901	-.3296	-.0507	.0193	-.0180
60.000			.4520	-.0266	-.3309	-.3877	-.4697	-.0282	.3241	-.1332	-.4220	-.1055	-.0427	-.0318	-.0636
90.000		.8883	.4711	-.0028	-.3260	-.3833	-.3650	.1172	.5884		-.5494	-.5201	-.1523	-.0984	-.0794
120.000			.5120	.0273	-.2939	-.3602	-.1985	.0378	.2466	.1184	.0298	-.0456	-.0554	-.1491	-.1659
135.000								.0532		.2442		-.1101		-.1956	
150.000			.5707	.0723	-.2603	-.3286	-.3935	.0691	.2109	.3332	-.0253	-.2770	-.2000	-.3100	-.2208
165.000				.1193	-.2300	-.3036	-.3909	.0642	.2368	.3861	.3284	-.1233	-.0878	-.1969	-.1816
180.000	1.1900	1.0630	.6446	.1469	-.2104	-.2809	-.3683	.0365	.2568	.4064	.4330	-.1342	-.0839	-.2374	-.1958
270.000		1.0780							.5490						

X/L	.7460	.8530	.9280
PHI			
.000	-.0496	.0685	-.0390
30.000	-.0261	.0878	-.0331
60.000	-.0264	.0945	.0491
90.000	.0175	.1205	
120.000	.0201	.0912	.2064
135.000	.0011	.0994	.0905
150.000	-.0071	.0685	.0210
165.000	.0227	.1230	.1796
180.000	.0256	.1430	.1858

ARC11-716 IA14 O1+T12+S12N25+A710 EXTERNAL TANK (RB1T32)

ALPHAO(5) = -2.930 BETAO (9) = 5.070

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L*	.0000	.0080	.0430	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1690	.8898	.4863	.0031	-.3117	-.3781	-.4486	-.3978	.1187	.0956	-.1417	-.2598	-.1552	-.0099	-.0420
30.000			.4347	-.0367	-.3434	-.4072	-.4565	-.2922	.1949	.0353	-.2099	-.3408	-.0645	-.0030	-.0204
60.000			.4142	-.0630	-.3544	-.4103	-.4864	-.0507	.3499	.1629	-.4132	-.1257	-.0590	-.0282	-.0503
90.000		.8385	.4230	-.0413	-.3526	-.4087	-.3687	-.0114	.3164		-.5224	-.4636	-.1846	-.1101	-.0857
120.000			.4622	-.0077	-.3247	-.3978	-.0155	.0178	.1187	.1736	.0083	-.0896	-.0977	-.1870	-.1624
135.000								.0404		.1942		-.1545		-.2348	
150.000			.5269	.0411	-.2877	-.3536	-.0443	.0414	.1854	.3159	-.0234	-.3504	-.2262	-.3679	-.2093
165.000				.0951	-.2499	-.3189	-.4042	.0422	.2111	.3613	.3023	-.1135	-.1223	-.2191	-.1950
180.000	1.1690	1.0220	.6297	.1359	-.2168	-.2875	-.3733	.0000	.2383	.3867	.4314	-.3795	-.1779	-.2429	-.2225
270.000		1.1240							.5483						

X/L*	.7460	.8530	.9280
PHI			
.000	-.0507	.0643	-.0422
30.000	-.0238	.0857	-.0396
60.000	-.0233	.0919	.0510
90.000	-.0035	.0950	
120.000	-.0022	.0769	.2314
135.000	-.0192	.0855	.0993
150.000	-.0234	.0529	-.0065
165.000	-.0123	.0918	.2002
180.000	-.0025	.1063	.2298

ALPHAO(9) = -2.920 BETAO (10) = 8.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L*	.0000	.0090	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1490	.8801	.4686	-.0086	-.3240	-.3877	-.4590	-.4074	.0834	.0406	-.1709	-.2317	-.1910	-.0379	-.0374
30.000			.4015	-.0603	-.3627	-.4226	-.4692	-.1984	.1234	.0952	-.2158	-.3079	-.0892	-.0137	-.0187
60.000			.3774	-.0863	-.3760	-.4284	-.5017	-.0655	.2472	-.1316	-.4055	-.1575	-.0703	-.0194	-.0395
90.000		.7933	.3759	-.0740	-.3760	-.4331	-.0603	-.0469	.5660		-.4711	-.3842	-.1978	-.1212	-.0951
120.000			.4191	-.0442	-.3551	-.4132	-.0182	-.0027	.0660	.1794	.0245	-.1262	-.1354	-.2171	-.1818
135.000								.0111		.2744		-.1957		-.2760	
150.000			.4903	.0101	-.3131	-.3747	-.0277	.0088	.1432	.2905	-.0168	-.4031	-.2709	-.4241	-.2355
165.000				.0768	-.2654	-.3330	-.4177	.0188	.1702	.3349	.2900	-.1246	-.1608	-.2755	-.2156
180.000	1.1490	.9643	.5211	.1279	-.2219	-.2941	-.3704	.0324	.1969	.3451	.4134	-.3645	-.2417	-.3202	-.2611
270.000		1.1570							.5461						

X/L*	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+Y12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHA0(9) = -2.920 BETA0 (10) = 8.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0617	.0491	-.0560
30.000	-.0405	.0808	-.0444
60.000	-.0366	.0947	.0613
90.000	-.0363	.0622	
120.000	-.0152	.0496	.2096
135.000	-.0332	.0826	.0852
150.000	-.0424	.0403	-.0376
165.000	-.0421	.0749	.1921
180.000	-.0507	.0762	.2116

ALPHA0(9) = -2.900 BETA0 (11) = 10.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1160	.8316	.4494	-.0190	-.3339	-.4014	-.4754	-.4063	.0222	-.0266	-.2168	-.2084	-.2081	-.0901	-.0741
30.000			.3684	-.0875	-.3802	-.4491	-.5035	-.1033	.0828	.0448	-.2323	-.2683	-.0878	-.0161	-.0454
60.000			.3395	-.1198	-.4037	-.4504	-.1178	-.0551	.0831	-.1046	-.3771	-.1941	-.0639	-.0177	-.0676
90.000		.7457	.3330	-.1174	-.4060	-.4420	-.0636	-.0631	.4523		-.4985	-.3303	-.1633	-.0984	-.1409
120.000			.3773	-.0643	-.3869	-.4063	-.0235	-.0325	.0379	.1473	.0445	-.1612	-.1716	-.2350	-.2221
135.000								-.0284		.3008		-.2361		-.3111	
150.000			.4518	-.0251	-.3415	-.4025	-.0510	-.0382	.1236	.2335	-.0269	-.4484	-.3568	-.4513	-.2708
165.000				.0545	-.2648	-.3548	-.4424	.0037	.1470	.2819	.2378	-.1791	-.2715	-.3250	-.2614
180.000	1.1160	.9421	.6110	.1192	-.2320	-.3047	-.3932	.0063	.1457	.3122	.3905	-.3093	-.2878	-.3628	-.3339
270.000		1.1900							.5480						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0889	.0284	-.0777
30.000	-.0907	.0732	-.0551
60.000	-.0494	.0910	.0587
90.000	-.0675	.0320	
120.000	-.0421	.0276	.1742
135.000	-.0535	.0712	.0621
150.000	-.0345	.0150	-.0756
165.000	-.0706	.0584	.1750
180.000	-.1064	.0309	.1814

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHA0(6) = -.795 BETA0 (1) = -10.040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.1190	.8785	.9075	.0299	-.3054	-.3723	-.4506	-.3830	.0601	-.0204	-.2040	-.1823	-.2049	-.1243	-.0780
30.000			.6427	.1587	-.2015	-.2772	-.3625	-.0766	.0160	-.1656	-.3234	-.1111	-.1352	-.1542	-.0646
60.000			.7695	.2752	-.1098	-.1848	-.1925	.2487	.2308	-.3305	-.3224	-.2369	-.0807	.0381	.0085
90.000		1.1990	.8268	.3318	-.0637	-.1436	-.1316	.4479	.5604		-.5669	-.3614	-.1446	-.0454	-.0036
120.000			.7918	.2995	-.0911	-.1693	-.1801	.2794	.3303	-.2290	.0129	.2969	.1662	.0449	.0187
135.000								.1636		-.0413		.2085		.0317	
150.000			.7077	.2199	-.1572	-.2322	-.3025	-.0035	.1639	.2902	.3290	.0593	-.0487	-.1432	-.0653
165.000				.1344	-.2248	-.2993	-.3820	-.2893	.1382	.3802	.4291	.1090	-.0531	-.2231	-.1037
180.000	1.1190	.9932	.5555	.0726	-.2678	-.3369	-.3908	-.2487	.1539	.4057	.4165	-.3523	-.1233	-.2775	-.1732
270.000		.7440							.6711						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0767	.0259	-.0859
30.000	-.0393	.0621	-.0438
60.000	.0512	.1959	.0857
90.000	.1056	.1179	
120.000	.1961	.1442	.8174
135.000	.2022	.3096	.5907
150.000	.1613	.3331	.6151
165.000	.1530	.3203	.6378
180.000	.1086	.2575	.4316

ALPHA0(6) = -.740 BETA0 (2) = -8.040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.1540	.9139	.5255	.0458	-.2893	-.3541	-.4253	-.3554	.1195	.0426	-.1609	-.1899	-.1741	-.0795	-.0547
30.000			.6322	.1443	-.2116	-.2845	-.3658	-.1613	.1077	-.0986	-.2840	-.1067	-.1116	-.1279	-.0661
60.000			.7261	.2348	-.1412	.2149	-.2457	.1590	.2469	-.2993	-.3405	-.1435	-.1323	.0113	.0085
90.000		1.1610	.7734	.2796	-.1047	-.1837	-.1853	.4443	.5623		-.5354	-.3988	-.1328	-.0542	-.0136
120.000			.7501	.2596	-.1228	-.2016	-.2338	.1808	.3267	-.1912	.0098	.2286	.1321	.0162	-.0225
135.000								-.1271		.0442		.1283		.0062	
150.000			.6902	.2008	-.1705	-.2455	-.3333	-.2480	.2229	.3153	.2509	.0908	-.0504	-.1435	-.0844
165.000				.1323	-.2241	-.2919	-.3791	-.2878	.1960	.3955	.4248	.0470	-.0313	-.1851	-.0994
180.000	1.1540	1.0010	.5708	.0782	-.2572	-.3238	-.3976	-.0672	.1857	.4158	.4327	-.4042	-.1064	-.2816	-.1446
270.000		.7967							.6815						

X/LT	.7480	.8530	.9280
PHI			

ARC11-716 IA14 OI+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(6) = -.740 BETAO (2) = -8.040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	-.0511	.0573	-.0582
30.000	-.0248	.0918	-.0274
60.000	.0311	.1886	.0874
90.000	.0834	.1559	
120.000	.1534	.1371	.7350
135.000	.1611	.2911	.9025
150.000	.1384	.3104	.5529
165.000	.1379	.3060	.6024
180.000	.1031	.2558	.4136

ALPHAO(6) = -.720 BETAO (3) = -5.990

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1941	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1840	.9452	.5462	.0527	-.2806	-.3472	-.4201	-.3451	.1537	.0812	-.1295	-.2174	-.1404	-.0211	-.0326
30.000			.6230	.1277	-.2290	-.2997	-.3779	-.2640	.1495	-.0393	-.2468	-.1170	-.0875	-.0819	-.0582
60.000			.6899	.1946	-.1743	-.2455	-.3451	.1032	.2704	-.2739	-.3767	-.1126	-.1397	-.0268	.0124
90.000		1.1250	.7238	.2276	-.1496	-.2251	-.2332	.4015	.5672		-.5242	-.4450	-.1294	-.0602	-.0207
120.000			.7056	.2138	-.1621	-.2381	-.2841	.0856	.3497	-.1382	-.0134	.1709	.1039	-.0027	-.0572
135.000								-.2215		.1082		.0813		-.0099	
150.000			.6641	.1728	-.1963	-. 5	-.3554	-.2970	.2669	.3458	.1839	.0693	-.0554	-.1531	-.1090
165.000				.1246	-.2328	-.2997	-.3887	-.2864	.2441	.4082	.4165	-.0452	-.0666	-.1947	-.1116
180.000	1.1840	1.0070	.5783	.0817	-.2540	-.3250	-.3993	-.0445	.2027	.4154	.4455	-.4273	-.1000	-.2553	-.1160
270.000		.8497							.6396						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0539	.0714	-.0459
30.000	-.0342	.1050	-.0164
60.000	.0103	.1731	.0758
90.000	.0594	.1623	
120.000	.1155	.1439	.6415
135.000	.1237	.2745	.4658
150.000	.1117	.2933	.5076
165.000	.1207	.2884	.5729
180.000	.0936	.2466	.3950

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHA0(6) = -.710 BETA0 (4) = -3.980

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2030	.9617	.5569	.0602	-.2686	-.3362	-.4139	-.3547	.1606	.1210	-.1070	-.2295	-.1070	.0179	-.0077
30.000			.6045	.1098	-.2365	-.3056	-.3846	-.3180	.1681	.0107	-.2070	-.1517	-.0609	-.0280	-.0380
60.000			.6490	.1566	-.2049	-.2697	-.3694	.0564	.2952	-.2476	-.3733	-.0985	-.0791	-.0635	.0090
90.000		1.0850	.6780	.1799	-.1853	-.2597	-.2724	.2823	.5733		-.5119	-.4718	-.1302	-.0610	-.0259
120.000			.6693	.1743	-.1911	-.2620	-.3136	.0009	.3703	-.1178	-.0342	.1212	.0834	-.0213	-.0898
135.000								-.2445		.1538		.0375		-.0303	
150.000			.6455	.1523	-.2108	-.2809	-.3694	-.2992	.2910	.3607	.1242	-.0128	-.0625	-.1655	-.1425
165.000				.1168	-.2340	-.2995	-.3889	-.1936	.2400	.4259	.3985	-.1011	-.0607	-.1895	-.1283
180.000	1.2030	1.0140	.5862	.0858	-.2495	-.3176	-.3948	-.0216	.2066	.4113	.4500	-.3322	-.0835	-.1846	-.1311
270.000		.8992							.6338						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0391	.0795	-.0345
30.000	-.0440	.0983	-.0015
60.000	-.0039	.1571	.0678
90.000	.0439	.1591	
120.000	.0942	.1012	.6029
135.000	.0981	.2400	.4288
150.000	.0906	.2661	.4507
165.000	.0994	.2701	.4903
180.000	.0839	.2389	.3638

ALPHA0(6) = -.700 BETA0 (5) = -2.010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2140	.9752	.5628	.0632	-.2647	-.3317	-.4076	-.3604	.1669	.1510	-.0859	-.2255	-.0748	.0432	.0082
30.000			.5882	.0873	-.2479	-.3159	-.3956	-.3269	.1805	.0619	-.1749	-.2027	-.0541	.0156	-.0143
60.000			.6117	.1126	-.2303	-.2963	-.3928	.0345	.3238	-.2206	-.3570	-.0950	-.0206	-.0616	-.0169
90.000		1.0440	.6281	.1315	-.2217	-.2905	-.3125	.1973	.5764		-.5191	-.4814	-.1370	-.0712	-.0369
120.000			.6291	.1325	-.2227	-.2907	-.3265	-.0481	.3854	-.0817	-.0365	.0656	.0653	-.0411	-.1139
135.000								-.1657		.1950		-.0174		-.0565	
150.000			.6217	.1202	-.2286	-.2968	-.3913	-.2273	.3081	.3757	.0728	-.1346	-.0601	-.1840	-.1789
165.000				.1047	-.2357	-.3052	-.3938	-.0903	.2303	.4273	.3735	-.1758	-.0557	-.1822	-.1312
180.000	1.2140	1.0150	.5926	.0875	-.2479	-.3144	-.3980	-.0259	.2134	.3963	.4326	-.2141	-.0544	-.1443	-.1513
270.000		.9453							.6227						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(6) = -.700 BETAO (5) = -2.010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0453	.0936	-.0138
30.000	-.0515	.0878	-.0097
60.000	-.0203	.1404	.0582
90.000	.0310	.1471	
120.000	.0774	.0856	.5299
135.000	.0725	.2101	.3526
150.000	.0493	.2266	.3423
165.000	.0753	.2370	.4645
180.000	.0573	.2067	.3750

ALPHAO(6) = -.690 BETAO (6) = .040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2180	.9762	.5629	.0601	-.2690	-.3340	-.4087	-.3606	.1593	.1453	-.0795	-.2192	-.0669	.0442	.0128
30.000			.5645	.0601	-.2677	-.3381	-.4080	-.3000	.1415	.0979	-.1650	-.2389	-.0435	.0306	-.0018
60.000			.5673	.0632	-.2654	-.3292	-.4199	.0147	.3583	-.1935	-.3531	-.1118	-.0159	-.0159	-.0329
90.000		.9954	.5744	.0778	-.2639	-.3271	-.3420	.1581	.5882		-.5381	-.4411	-.1335	-.0815	-.0559
120.000			.5800	.0858	-.2596	-.3236	-.3456	-.0128	.3982	-.0422	-.0502	.0167	.0247	-.0704	-.1399
135.000								-.0290		.2137		-.0739		-.0986	
150.000			.5941	.0863	-.2537	-.3167	-.4106	-.0089	.2537	.3940	.0369	-.1710	-.0681	-.2087	-.2164
165.000				.0925	-.2456	-.3164	-.4024	.0163	.2260	.3946	.3256	-.1567	-.0590	-.1666	-.1636
180.000	1.2180	1.0140	.5949	.0920	-.2479	-.3169	-.4029	-.0192	.2186	.3844	.3982	-.0806	-.0401	-.1345	-.1471
270.000		.9969							.5965						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0468	.0913	-.0202
30.000	-.0476	.0934	-.0070
60.000	-.0413	.1249	.0494
90.000	.0235	.1303	
120.000	.0674	.0934	.4034
135.000	.0602	.1581	.2167
150.000	.0426	.1568	.2178
165.000	.0653	.1706	.2193
180.000	.0692	.1734	.1853

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(6) = -.690 BETAO (7) = 2.030

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2100	.9698	.5567	.0589	-.2711	-.3380	-.4089	-.3539	.1846	.1323	-.0937	-.2260	-.0783	.0375	.0035
30.000			.5362	.0384	-.2879	-.3549	-.4227	-.0940	.1211	.1071	-.1687	-.2677	-.0416	.0293	-.0075
60.000			.5244	.0310	-.2917	-.3569	-.4423	.0161	.3727	-.1688	-.3531	-.1229	-.0256	-.0056	-.0376
90.000		.9481	.5240	.0379	-.2935	-.3605	-.3575	.1407	.5965		-.5546	-.4139	-.1484	-.0841	-.0697
120.000			.5350	.0474	-.2894	-.3549	-.3889	.0440	.3915	-.0135	-.0533	-.0194	-.0187	-.1046	-.1538
135.000								.0353		.2269		-.1172		-.1374	
150.000			.5598	.0607	-.2723	-.3365	-.4284	.0435	.2003	.3588	.0521	-.2501	-.1346	-.2380	-.2097
165.000				.0785	-.2568	-.3296	-.4090	.0463	.2103	.3607	.3003	-.1356	-.0610	-.1534	-.1518
180.000	1.2100	1.0130	.5914	.0877	-.2502	-.3202	-.4026	.0075	.2085	.3696	.3930	-.0969	-.0478	-.1672	-.1652
270.000		1.0390							.5795						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0532	.0931	-.0225
30.000	-.0498	.1058	-.0163
60.000	-.0418	.1174	.0330
90.000	.0204	.1218	
120.000	.0538	.1205	.2597
135.000	.0430	.1362	.1331
150.000	.0403	.1207	.0704
165.000	.0452	.1571	.2463
180.000	.0547	.1795	.1839

ALPHAO(6) = -.710 BETAO (8) = 4.060

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2010	.9580	.5485	.0574	-.2676	-.3380	-.4124	-.3608	.1776	.1292	-.1020	-.2317	-.1150	.0276	-.0056
30.000			.5019	.0239	-.3033	-.3655	-.4305	-.3217	.2160	.1051	-.1759	-.2906	-.0587	.0265	-.0076
60.000			.4791	.0067	-.3181	-.3739	-.4565	-.0095	.3730	-.1366	-.3406	-.1298	-.0413	-.0060	-.0300
90.000		.8965	.4755	.0085	-.3155	-.3808	-.3770	.0898	.6040		-.5416	-.3165	-.1206	-.0990	-.0688
120.000			.4926	.0157	-.3155	-.3745	-.4354	.0124	.3894	.0183	-.0579	-.0499	-.0436	-.1233	-.1472
135.000								.0122		.2506		-.1412		-.1624	
150.000			.5290	.0379	-.2890	-.3497	-.4390	.0252	.1533	.3089	-.0255	-.3038	-.1686	-.2740	-.2031
165.000				.0684	-.2658	-.3344	-.4184	.0337	.2026	.3456	.2989	-.1410	-.0809	-.1649	-.1558
180.000	1.2010	1.0170	.5909	.0930	-.2487	-.3176	-.3999	.0024	.2283	.3682	.4131	-.2442	-.0553	-.2148	-.1684
270.000		1.0870							.5692						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(6) = -.710 BETAO (8) = 4.060

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0449	.0749	-.0325
30.000	-.0271	.1023	-.0229
60.000	-.0171	.1136	.0376
90.000	.0256	.1229	
120.000	.0387	.1162	.2144
135.000	.0184	.1224	.1088
150.000	.0108	.0940	.0361
165.000	.0399	.1428	.2005
180.000	.0445	.1647	.2082

ALPHAO(6) = -.720 BETAO (9) = 6.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1810	.9435	.5431	.0538	-.2765	-.3458	-.4215	-.3704	.1484	.1020	-.1237	-.2200	-.1712	-.0192	-.0264
30.000			.4747	-.0023	-.3178	-.3835	-.4293	-.3712	.2191	.1074	-.1789	-.3041	-.0782	-.0040	-.0130
60.000			.4393	-.0387	-.3438	-.3934	-.4756	-.0189	.2854	-.1122	-.3253	-.1545	-.0533	-.0161	-.0336
90.000		.8472	.4281	-.0449	-.3415	-.4039	-.4106	.0857	.6059		-.5345	-.2982	-.1268	-.0949	-.0757
120.000			.4483	-.0105	-.3349	-.3955	-.2715	-.0351	.2869	.0553	-.0707	-.0871	-.0746	-.1491	-.1404
135.000								-.0133		.2279		-.1839		-.1913	
150.000			.4970	.0100	-.3053	-.3687	-.2003	.0070	.1434	.2998	-.0383	-.3750	-.1946	-.3322	-.1864
165.000				.0512	-.2806	-.3489	-.4310	.0150	.1801	.3224	.2818	-.1320	-.1136	-.2016	-.1711
180.000	1.1810	.9947	.5777	.0829	-.2569	-.3247	-.4068	.0114	.1960	.3452	.3997	-.3950	-.1387	-.2342	-.1996
270.000		1.1300							.5633						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0504	.0660	-.0453
30.000	-.0140	.0954	-.0344
60.000	-.0094	.1070	.0459
90.000	.0140	.1248	
120.000	.0104	.1075	.2457
135.000	-.0051	.1119	.1129
150.000	-.0034	.0771	-.0024
165.000	.0082	.1173	.2161
180.000	.0108	.1294	.2465

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(6) = -.730 BETAO (10) = 8.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1500	.9089	.5217	.0367	-.2864	-.3523	-.4284	-.3865	.0960	.0513	-.1538	-.1937	-.2053	-.0752	-.0520
30.000			.4368	-.0315	-.3467	-.4073	-.4419	-.2490	.1455	.0913	-.1882	-.3169	-.0980	-.0144	-.0044
60.000			.3962	-.0685	-.3688	-.4215	-.4940	-.0285	.2371	-.0963	-.3408	-.1597	-.0561	-.0156	-.0175
90.000		.7959	.3844	-.0804	-.3899	-.4294	-.4335	.0621	.6057		-.5467	-.4583	-.1726	-.1245	-.0716
120.000			.4031	-.0523	-.3627	-.4210	-.0890	-.0529	.1163	.1025	-.1006	-.1427	-.1027	-.1877	-.1581
135.000								-.0279		.1409		-.2206		-.2362	
150.000			.4575	-.0205	-.3355	-.3961	-.0494	-.0094	.1284	.2938	-.0369	-.4293	-.2460	-.3753	-.2123
165.000				.0295	-.2981	-.3633	-.3949	-.0094	.1668	.3032	.2555	-.1608	-.1288	-.2406	-.1994
180.000	1.1500	.9043	.5673	.0782	-.2625	-.3305	-.4163	.0216	.1668	.3032	.3751	-.3829	-.2209	-.3025	-.2477
270.000		1.1640							.5584						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0532	.0527	-.0620
30.000	-.0333	.0843	-.0436
60.000	-.0315	.1010	.0581
90.000	-.0097	.1102	
120.000	.0021	.0776	.2898
135.000	-.0159	.1097	.1252
150.000	-.0175	.0704	-.0076
165.000	-.0136	.0969	.2194
180.000	-.0277	.0982	.2284

ALPHAO(6) = -.740 BETAO (11) = 10.160

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1210	.8754	.5004	.0225	-.2980	-.3708	-.4488	-.3857	.0219	-.0125	-.1950	-.1846	-.2255	-.1240	-.0704
30.000			.4092	-.0650	-.3697	-.4355	-.4961	-.0920	.0951	.0526	-.2087	-.2862	-.1175	-.0128	-.0282
60.000			.3552	-.1101	-.3934	-.4490	-.3935	-.0541	.1709	-.0664	-.3382	-.1650	-.0711	-.0118	-.0459
90.000		.7499	.3404	-.1137	-.3924	-.4539	-.1539	-.0773	.6465		-.5211	-.3742	-.1654	-.0965	-.1135
120.000			.3601	-.0921	-.3891	-.4470	-.0755	-.0630	.0057	.1405	-.0855	-.1880	-.1444	-.2228	-.1942
135.000								-.0356		.0834		-.2477		-.2679	
150.000			.4210	-.0503	-.3562	-.4202	-.0510	-.0287	.1141	.2769	-.0259	-.4468	-.3314	-.3969	-.2453
165.000				.0120	-.3117	-.3833	-.2803	-.0284	.1377	.2550	.2411	-.1911	-.2522	-.2968	-.2366
180.000	1.1210	.8623	.5577	.0698	-.2634	-.3408	-.4225	.0476	.1128	.2647	.3445	-.3196	-.2755	-.3394	-.3006
270.000		1.1980							.5622						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHA0(6) = -.740 BETA0 (11) = 10.160

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0788	.0303	-.0831
30.000	-.0488	.0786	-.0320
60.000	-.0571	.1026	.0705
90.000	-.0442	.0838	
120.000	-.0149	.0583	.2470
135.000	-.0344	.1087	.0996
150.000	-.0364	.0593	-.0385
165.000	-.0522	.0855	.2089
180.000	-.0820	.0553	.2017

ALPHA0(7) = 2.030 BETA0 (1) = -10.000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1190	.9374	.5676	.0923	-.2536	-.3246	-.4042	-.3368	.0785	-.0023	-.1580	-.1603	-.2013	-.1630	-.0799
30.000			.7080	.2258	-.1489	-.2261	-.3128	-.0272	.0721	-.1060	-.1931	-.0918	-.1031	-.1194	-.0773
60.000			.8100	.3203	-.0734	-.1470	-.2564	.2495	.3076	-.2563	-.2405	-.1172	-.1018	-.0027	.0235
90.000		1.1960	.8252	.3326	-.0619	-.1424	-.1281	.4417	.5520		-.4133	-.4487	-.3120	-.0944	-.0169
120.000			.7460	.2598	-.1244	-.1993	-.2234	.2344	.2107	-.3157	-.4157	.1612	.2616	.1053	.0482
135.000								.0957		-.1896		.1118		.0741	
150.000			.6400	.1597	-.2030	-.2764	-.3528	-.1659	.0938	.1989	.2435	-.0205	.0379	-.1035	-.0433
165.000				.0711	-.2707	-.3437	-.4177	-.3322	.0907	.3362	.3690	.0784	.0382	-.1811	-.0653
180.000	1.1190	.9335	.4909	.0167	-.3107	-.3730	-.3886	-.2447	.1379	.3621	.3885	-.3688	-.0896	-.2235	-.1558
270.000		.7416							.6885						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0563	.0172	-.0934
30.000	-.0042	.0878	-.0509
60.000	.0765	.2195	.0922
90.000	.1140	.1265	
120.000	.2148	.2175	.8521
135.000	.2217	.3585	.5749
150.000	.1876	.3662	.6339
165.000	.1816	.3528	.5656
180.000	.1414	.2850	.4499

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(7) = 2.080 BETAO (2) = -8.030

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1520	.9720	.5922	.1093	-.2382	-.3068	-.3846	-.3226	.1493	.0552	-.1263	-.1601	-.1643	-.1006	-.0598
30.000			.7008	.2100	-.1586	-.2340	-.3213	-.1369	.1411	-.0436	-.1771	-.0844	-.0768	-.0936	-.0585
60.000			.7721	.2785	-.1026	-.1773	-.2844	.1940	.3217	-.2242	-.2428	-.0839	-.0616	-.0517	.0157
90.000		1.1590	.7764	.2826	-.1021	-.1794	-.2245	.4117	.5512		-.4230	-.4468	-.3211	-.1113	-.0178
120.000			.7064	.2184	-.1555	-.2315	-.2844	.1708	.2284	-.2876	-.4033	.1021	.2230	.0760	.0263
135.000								-.1597		-.1039		.0195		.0480	
150.000			.6241	.1364	-.2193	-.2890	-.3786	-.2987	.1471	.2398	.2371	-.0689	.0388	-.1085	-.0512
165.000				.0668	-.2743	-.3411	-.4189	-.3331	.1489	.3552	.3749	.0144	.0206	-.1474	-.0589
180.000	1.1520	.9398	.5052	.0187	-.3022	-.3655	-.4377	-.0822	.1938	.3729	.4003	-.4101	-.1117	-.2547	-.1053
270.000		.7910							.6573						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0414	.0487	-.0709
30.000	-.0100	.1104	-.0287
60.000	.0563	.2095	.0866
90.000	.0960	.1394	
120.000	.1729	.1836	.3072
135.000	.1798	.3349	.5444
150.000	.1592	.3480	.5953
165.000	.1654	.3448	.6135
180.000	.1315	.2849	.4175

ALPHAO(7) = 2.080 BETAO (3) = -5.990

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1780	1.0070	.6121	.1188	-.2301	-.3015	-.3810	-.3182	.1908	.1019	-.1004	-.1741	-.1412	-.0403	-.0210
30.000			.6900	.1936	-.1745	-.2490	-.3354	-.2689	.1921	.0095	-.1727	-.0994	-.0693	-.0556	-.0287
60.000			.7338	.2359	-.1386	-.2100	-.3167	.1444	.3409	-.1981	-.2548	-.0792	-.0207	-.0546	-.0030
90.000		1.1210	.7248	.2302	-.1462	-.2204	-.3164	.3178	.5547		-.4491	-.4416	-.3185	-.1273	-.0231
120.000			.6670	.1736	-.1944	-.2630	-.3252	.0303	.2619	-.2600	-.3610	.0490	.1863	.0519	-.0077
135.000								-.2565		-.0282		-.0909		.0260	
150.000			.5996	.1093	-.2416	-.3088	-.3941	-.3008	.1938	.2774	.2230	-.1035	.0313	-.1134	-.0705
165.000				.0543	-.2936	-.3466	-.4232	-.3005	.1765	.3599	.3820	-.0400	.0013	-.1526	-.0656
180.000	1.1780	.9433	.5112	.0166	-.2992	-.3849	-.4347	-.0223	.1392	.3546	.4168	-.4359	-.0789	-.1175	-.0870
270.000		.8419							.6350						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT1D EXTERNAL TANK (RB1T32)

ALPHAO(7) = 2.080 BETAO (3) = -5.990

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0336	.0692	-.0530
30.000	-.0187	.1088	-.0228
60.000	.0326	.1864	.0761
90.000	.0719	.1333	
120.000	.1327	.1871	.0963
135.000	.1422	.3149	.4846
150.000	.1325	.3211	.5346
165.000	.1446	.3208	.5801
180.000	.1215	.2757	.4011

ALPHAO(7) = 1.940 BETAO (4) = -4.010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2030	1.0240	.6253	.1828	-.2229	-.2939	-.3744	-.3246	.2112	.1493	-.0678	-.1769	-.1372	.0139	.0084
30.000			.6673	.1666	-.1923	-.2660	-.3459	-.2779	.2132	.0609	-.1310	-.1468	-.0634	-.0231	-.0013
60.000			.6893	.1884	-.1750	-.2446	-.3452	.0988	.3547	-.1722	-.2593	-.1059	.0259	.0162	.0143
90.000		1.0820	.6752	.1794	-.1852	-.2591	-.3465	.2261	.5664		-.4995	-.1624	-.0965	-.0731	-.0311
120.000			.6289	.1369	-.2185	-.2889	-.3480	-.0768	.2968	-.2118	-.3124	.0099	.1510	.0284	-.0540
135.000								-.2911		.0499		-.1401		.0040	
150.000			.5956	.0985	-.2503	-.3214	-.4012	-.3173	.2328	.3128	.1751	-.1191	.0390	-.1149	-.1046
165.000				.0533	-.2770	-.3433	-.4251	-.0742	.1857	.3713	.3746	-.0981	-.0020	-.1296	-.0811
180.000	1.2030	.9543	.5227	.0277	-.2908	-.3576	-.4310	-.0190	.1429	.3446	.4180	-.3410	-.0424	-.1208	-.1092
270.000		.8975							.6203						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0251	.0791	.0053
30.000	-.0218	.0999	.0030
60.000	.0028	.1539	.0601
90.000	.0498	.1277	
120.000	.1072	.1694	.6202
135.000	.1162	.2839	.4387
150.000	.1128	.2960	.4752
165.000	.1269	.2950	.5123
180.000	.1066	.2600	.3707

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHA0(7) = 1.950 BETA0 (5) = -2.000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2140	1.0340	.6260	.1273	-.2186	-.2903	-.3694	-.3195	.1982	.1696	-.0519	-.1748	-.1196	.0393	.0260
30.000			.6454	.1442	-.2082	-.2812	-.3588	-.3108	.2263	.0979	-.1287	-.1665	-.0644	.0100	.0132
60.000			.6447	.1447	-.2082	-.2754	-.3746	.0687	.3521	-.1436	-.2472	-.1144	.0111	.0259	.0143
90.000		1.0390	.6224	.1289	-.2174	-.2901	-.3782	.1413	.5775		-.5287	-.1372	-.0512	-.0480	-.0398
120.000			.5897	.0960	-.2440	-.3131	-.3600	-.0966	.3235	-.1751	-.2503	.0041	.1169	.0010	-.0797
135.000								-.2500		.1025		-.1284		-.0231	
150.000			.5537	.0681	-.2670	-.3329	-.4192	-.2109	.2320	.3298	.0845	-.1584	.0177	-.1302	-.1389
165.000				.0467	-.2815	-.3443	-.4246	.0022	.1478	.3609	.3356	-.1520	-.0117	-.1233	-.0931
180.000	1.2140	.9556	.5290	.0332	-.2909	-.3522	-.4272	.0033	.1550	.3274	.3891	-.1419	-.0299	-.0924	-.1121
270.000		.9490							.6036						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0274	.0815	.0150
30.000	-.0251	.0982	.0256
60.000	-.0089	.1462	.0731
90.000	.0310	.1580	
120.000	.0917	.1606	.5088
135.000	.0891	.2518	.3[illegible]4
150.000	.0725	.2567	.3683
165.000	.1005	.2614	.4739
180.000	.0840	.2247	.3706

ALPHA0(7) = 1.950 BETA0 (6) = .040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2150	1.0360	.6277	.1252	-.2188	-.2913	-.3753	-.3249	.2071	.1677	-.0488	-.1761	-.1032	.0420	.0270
30.000			.6208	.1163	-.2313	-.2997	-.3804	-.3045	.1828	.1254	-.1351	-.1829	-.0603	.0271	.0108
60.000			.5968	.0981	-.2435	-.3065	-.4011	.0567	.3543	-.1179	-.2506	-.1052	-.0032	.0232	-.0007
90.000		.9892	.5734	.0754	-.2613	-.3266	-.4085	.0967	.5929		-.5962	-.0785	-.0447	-.0584	-.0563
120.000			.5476	.0559	-.2789	-.3447	-.3609	-.0719	.3299	-.1339	-.2139	.0027	.0643	-.0408	-.1053
135.000								-.0402		.1426		-.1219		-.0615	
150.000			.5399	.0439	-.2871	-.3516	-.4399	.0008	.2101	.3306	.0105	-.1842	-.0300	-.1557	-.1701
165.000				.0387	-.2963	-.3559	-.4358	.0192	.1626	.3379	.2956	-.1504	-.0287	-.1188	-.1198
180.000	1.2150	.9508	.5279	.0363	-.2914	-.3585	-.4363	-.0072	.1595	.3366	.3612	-.1052	-.0241	-.0894	-.1038
270.000		.9925							.5853						

X/LT	.7460	.8530	.928[illegible]
PHI			

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(7) = 1.950 BETAO (6) = .040

SECTION (1)EXTERNAL TAN DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0274	.0716	.0017
30.000	-.0282	.1048	.0179
60.000	-.0200	.1329	.0723
90.000	.0257	.1391	
120.000	.0829	.1540	.3821
135.000	.0747	.1885	.2193
150.000	.0579	.1810	.2268
165.000	.0844	.1943	.2193
180.000	.0878	.1949	.1871

ALPHAO(7) = 1.930 BETAO (7) = 2.030

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2110	1.0310	.6210	.1242	-.2214	-.2948	-.3723	-.3245	.2497	.1583	-.0567	-.1743	-.1217	.0375	.0260
30.000			.5868	.0877	-.2478	-.3172	-.3921	-.3214	.2025	.1307	-.1356	-.2012	-.0775	.0262	.0155
60.000			.5518	.0538	-.2709	-.3362	-.4243	.0318	.3002	-.0807	-.2430	-.1199	-.0240	.0109	-.0022
90.000		.9449	.5233	.0393	-.2925	-.3530	-.4212	.0438	.6197		-.6131	-.0505	-.0353	-.0475	-.0602
120.000			.5072	.0311	-.3007	-.3657	-.3690	-.0360	.3428	-.1004	-.1775	-.0067	.0265	-.0597	-.1118
135.000								-.0093		.1652		-.1362		-.0826	
150.000			.5129	.0308	-.3009	-.3629	-.4516	-.0068	.1629	.3245	.0308	-.2460	-.0741	-.1730	-.1666
165.000				.0312	-.2956	-.3586	-.4385	.0086	.1606	.3248	.2716	-.1494	-.0276	-.0996	-.1063
180.000	1.2110	.9515	.5320	.0361	-.2935	-.3525	-.4346	.0078	.1571	.3305	.3699	-.1064	-.0201	-.1032	-.1166
270.000		1.0390							.5725						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0306	.0825	.0161
30.000	-.0327	.1026	.0038
60.000	-.0253	.1280	.0778
90.000	.0292	.1453	
120.000	.0743	.1427	.2623
135.000	.0699	.1638	.1441
150.000	.0663	.1465	.0907
165.000	.0728	.1840	.2569
180.000	.0810	.2050	.1991

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHA0(7) = 1.00 BETA0 (8) = 4.070

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1980	1.0140	.6106	.1172	-.2268	-.3006	-.3787	-.3279	.2207	.1438	-.0703	-.1833	-.1537	.0159	.0092
30.000			.5510	.0614	-.2688	-.3362	-.4075	-.3400	.2733	.1330	-.1509	-.2179	-.0996	.0172	.0061
60.000			.5052	.0194	-.3021	-.3803	-.4461	.0258	.2064	-.0391	-.2404	-.1302	-.0543	-.0092	-.0172
90.000		.8933	.4749	.0028	-.3210	-.3792	-.1858	.0125	.6411		-.6301	-.0461	-.0584	-.0625	-.0757
120.000			.4680	-.0021	-.3253	-.3874	-.3960	.0072	.3404	-.0603	-.1590	-.0318	-.0072	-.0842	-.1229
135.000								-.0215		.2061		-.1574		-.1152	
150.000			.4849	.0023	-.3227	-.3754	-.4574	-.0141	.1351	.3127	-.0241	-.3168	-.1138	-.2154	-.1751
165.000				.0201	-.3042	-.3680	-.4479	.0010	.1615	.3224	.2636	-.1563	-.0558	-.1147	-.1221
180.000	1.1980	.9552	.5279	.0365	-.2925	-.3578	-.4368	-.0115	.1666	.3344	.3744	-.1871	-.0323	-.1452	-.1273
270.000		1.0850							.5653						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0294	.0881	.0105
30.000	-.0202	.1100	-.0034
60.000	-.0179	.1180	.0653
90.000	.0301	.1420	
120.000	.0581	.1399	.2162
135.000	.0450	.1505	.1199
150.000	.0397	.1139	.0584
165.000	.0627	.1668	.2227
180.000	.0668	.1900	.2289

ALPHA0(7) = 1.980 BETA0 (9) = 6.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1760	1.0010	.6049	.1153	-.2322	-.3051	-.3845	-.3358	.1677	.1058	-.0950	-.1812	-.1514	-.0434	-.0167
30.000			.5208	.0360	-.2942	-.3608	-.4081	-.3662	.2484	.1336	-.1553	-.2204	-.1064	-.0094	-.0085
60.000			.4582	-.0141	-.3270	-.3680	-.3615	-.0033	.2039	-.0193	-.2396	-.1579	-.0792	-.0387	-.0344
90.000		.8447	.4259	-.0413	-.3471	-.4020	-.0619	-.3172	.6188		-.6244	-.0941	-.0766	-.0718	-.0796
120.000			.4218	-.0469	-.3502	-.4084	-.4107	-.0335	.2871	-.0190	-.1424	-.0733	-.0475	-.1113	-.1242
135.000								-.0474		.2199		-.1823		-.1439	
150.000			.4497	-.0210	-.3369	-.3924	-.3150	-.0366	.1010	.2822	-.0644	-.3737	-.1511	-.2683	-.1725
165.000				.0004	-.3153	-.3812	-.4622	-.0305	.1448	.2926	.2570	-.1602	-.0922	-.1343	-.1394
180.000	1.1760	.9359	.5128	.0244	-.3008	-.3649	-.4429	-.0174	.1648	.2975	.3559	-.3656	-.0919	-.1875	-.1598
270.000		1.1250							.5563						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 OI+712+S12N25+AT1G EXTERNAL TANK (RB1T3E)

ALPHAO(7) = 1.980 BETAO (9) = 6.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	-.0341	.0637	-.0514
30.000	-.0171	.0972	-.0165
60.000	-.0130	.1070	.0463
90.000	.0232	.1392	
120.000	.0391	.1346	.2202
135.000	.0298	.1364	.1182
150.000	.0138	.1013	.0082
165.000	.0357	.1357	.2320
180.000	.0411	.1488	.2532

ALPHAO(7) = 1.980 BETAO (10) = 8.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.1520	.9705	.5884	.1003	-.2391	-.3137	-.3934	-.3470	.1066	.0474	-.1263	-.1674	-.1796	-.1086	-.0595
30.000			.4815	.0026	-.3197	-.3845	-.4323	-.3722	.1655	.1193	-.1548	-.2102	-.1296	-.0360	-.0153
60.000			.4118	-.0530	-.3578	-.4160	-.3059	-.0317	.2387	-.0306	-.2480	-.1685	-.0975	-.0607	-.0332
90.000		.7949	.3795	-.0780	-.3718	-.4287	-.0422	-.0340	.5416		-.5502	-.1355	-.0972	-.0857	-.0857
120.000			.3800	-.0736	-.3748	-.4305	-.1530	-.0594	.1883	.0208	-.1186	-.1166	-.0840	-.1401	-.1430
135.000								-.0656		.1894		-.2187		-.1821	
150.000			.4165	-.0510	-.3565	-.4160	-.1292	-.0568	.0971	.2716	-.0622	-.4273	-.1952	-.2957	-.1881
165.000				-.0191	-.3352	-.4007	-.4635	-.0568	.1293	.2689	.2285	-.1863	-.1330	-.2081	-.1677
180.000	1.1520	.8450	.5038	.0210	-.3080	-.3728	-.4489	-.0222	.1178	.2620	.3375	-.4025	-.1732	-.2571	-.2.28
270.000		1.1690							.5529						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0448	.0441	-.0758
30.000	-.0166	.0765	-.0482
60.000	-.0227	.1001	.0357
90.000	.0003	.1284	
120.000	.0290	.1240	.2480
135.000	.0162	.1345	.1213
150.000	.0030	.0927	-.0067
165.000	.0089	.1112	.2464
180.000	-.0021	.1159	.2480

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHA0(7) = 1.940 BETA0 (11) = 10.140

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L=	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1170	.9349	.5628	.0677	-.2519	-.3241	-.4068	-.3497	.0022	-.0188	-.1609	-.1643	-.2095	-.1127	-.0773
30.000			.4372	-.0265	-.3389	-.4060	-.4771	-.3257	.1041	.1080	-.1578	-.2005	-.1563	-.0579	-.0078
60.000			.3648	-.0885	-.3902	-.4405	-.3357	-.0518	.2586	-.0377	-.2357	-.1788	-.1214	-.0801	-.0331
90.000		.7446	.3388	-.1116	-.3931	-.4451	-.0595	-.0815	.4948		-.4662	-.1713	-.1139	-.0976	-.1074
120.000			.3419	-.1108	-.3983	-.4509	-.1125	-.0854	.0831	.0569	-.0994	-.1659	-.1137	-.1812	-.1601
135.000								-.0886		.1169		-.2470		-.2206	
150.000			.3853	-.0800	-.3833	-.4377	-.1074	-.0537	.0066	.2291	-.0424	-.4472	-.2570	-.3487	-.2097
165.000				-.0379	-.3516	-.4108	-.2329	-.0654	.0888	.2105	.2029	-.2144	-.1753	-.2576	-.1915
180.000	1.1170	.7983	.4965	.0096	-.3130	-.3801	-.4574	-.0073	.0910	.2095	.2956	-.3575	-.2133	-.3145	-.2640
270.000		1.1960							.5579						

X/L=	.7460	.8530	.9280
PHI			
.000	-.0627	.0175	-.0945
30.000	-.0452	.0582	-.0586
60.000	-.0514	.0993	.0451
90.000	-.0339	.1159	
120.000	.0080	.1057	.2540
135.000	-.0104	.1306	.1192
150.000	-.0067	.0785	-.0208
165.000	-.0231	.1084	.2420
180.000	-.0483	.0776	.2145

ALPHA0(8) = 3.970 BETA0 (1) = -9.990

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L=	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1070	.9768	.6159	.1382	-.2176	-.2918	-.3736	-.3044	.1061	.0122	-.1333	-.1385	-.1644	-.1388	-.0705
30.000			.7599	.2717	-.1111	-.1894	-.2786	.0219	.1187	-.0650	-.1408	-.0632	-.0658	-.0797	-.0618
60.000			.8392	.3472	-.0476	-.1221	-.0353	.2775	.3491	-.0021	-.1925	-.0619	-.0075	-.0231	.0079
90.000		1.1850	.8195	.3300	-.0529	-.1432	-.2413	.3981	.5311		-.2431	-.3559	-.3116	-.2093	-.0428
120.000			.7088	.2265	-.1509	-.227	-.2557	.1776	.1293	-.3716	-.4601	-.1150	.2952	.1607	.0838
135.000								.0327		-.2740		-.0311		.1120	
150.000			.4886	.1134	-.2419	-.3112	-.3804	-.1042	.0007	.1794	.1728	-.3973	.0699	-.0607	-.0308
165.000				.0263	-.3074	-.3767	-.4394	-.3621	.0552	.3145	.3425	.0374	.0286	-.1216	-.0378
180.000	1.1070	.8814	.4441	-.0303	-.3443	-.4040	-.4103	-.2596	.1333	.3479	.3712	-.3817	-.0575	-.1776	-.1461
270.000		.7305							.5172						

X/L=	.7460	.8530	.9280
PHI			

ARC11-716 IA14 OL+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHA0(8) = 3.970 BETA0 (1) = -9.990

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	-.0490	.0125	-.1124
30.000	.0138	.0997	-.0577
60.000	.0907	.2248	.0835
90.000	.0940	.0807	
120.000	.2374	.2429	.8638
135.000	.2463	.3834	.9981
150.000	.2032	.3832	.6543
165.000	.1996	.3662	.6568
180.000	.1566	.2915	.4414

ALPHA0(8) = 3.990 BETA0 (2) = -8.000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1790	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1430	1.0140	.6379	.1535	-.2015	-.2767	-.3599	-.2384	.1635	.0702	-.0970	-.1490	-.1417	-.0875	-.0388
30.000			.7462	.2539	-.1226	-.2002	-.2905	-.1548	.1774	-.0082	-.1169	-.0836	-.0563	-.0522	-.0349
60.000			.7978	.3019	-.0819	-.1592	-.2671	.2482	.3621	-.1743	-.1916	-.0725	.0324	.0137	-.0018
90.000		1.1490	.7676	.2779	-.1043	-.1831	-.2807	.3517	.5291		-.3776	-.2246	-.2391	-.1967	-.0654
120.000			.6736	.1849	-.1819	-.2572	-.3393	.1453	.1607	-.3449	-.4545	-.1339	.2261	.1262	.0550
135.000								-.1042		-.1722		-.1477		.0862	
150.000			.5748	.0906	-.2534	-.3236	-.4038	-.3092	.1068	.2281	.1803	-.1622	.0670	-.0695	-.0292
165.000				.0242	-.3086	-.3724	-.4277	-.3554	.1184	.3307	.3456	-.0154	.0329	-.1131	-.0335
180.000	1.1430	.8957	.4572	-.0200	-.3322	-.3958	-.4526	-.0831	.1450	.3464	.3894	-.4180	-.0823	-.1709	-.0867
270.000		.7835							.6112						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0281	.0423	-.0726
30.000	.0088	.1137	-.0361
60.000	.0576	.2025	.0678
90.000	.0719	.0536	
120.000	.1933	.2192	.8168
135.000	.2028	.3567	.5583
150.000	.1801	.3621	.6064
165.000	.1860	.3538	.6146
180.000	.1500	.2921	.4263

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(8) = 3.970 BETAO (3) = -6.020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1690	1.0450	.6589	.1677	-.1948	-.2657	-.3496	-.2949	.2099	.1180	-.0621	-.1524	-.1252	-.0425	-.0090
30.000			.7340	.2356	-.1404	-.2134	-.3043	-.2291	.2229	.0448	-.1092	-.1226	-.0630	-.0204	.0026
60.000			.7552	.2561	-.1219	-.1951	-.2990	.1819	.3752	-.1444	-.1976	-.1257	.0255	.0424	.0359
90.000		1.1080	.7174	.2249	-.1506	-.2240	-.3180	.2829	.5324		-.4151	-.1798	.0481	-.0582	-.0229
120.000			.6303	.1435	-.2146	-.2850	-.3712	.0817	.2034	-.2873	-.3965	-.1759	.1660	.1025	.0193
135.000								-.2625		-.0608		-.2151		.0687	
150.000			.5527	.0672	-.2721	-.3382	-.4157	-.3255	.1505	.2613	.1679	-.1995	.0396	-.0643	-.0507
165.000				.0131	-.3117	-.3776	-.4152	-.2332	.1439	.3398	.3449	-.0482	.0248	-.0819	-.0414
180.000	1.1690	.8966	.4670	-.0150	-.3267	-.3908	-.4604	-.0237	.1078	.3316	.3956	-.4267	-.0428	-.0940	-.0700
270.000		.8336							.6302						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0089	.0871	-.0065
30.000	.0103	.1194	.0043
60.000	.0395	.1775	.0657
90.000	.0669	.1145	
120.000	.1424	.2271	.7042
135.000	.1578	.3293	.4873
150.000	.1500	.3303	.5384
165.000	.1628	.3280	.5813
180.000	.1330	.2808	.3941

ALPHAO(8) = 3.930 BETAO (4) = -3.990

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1930	1.0660	.6715	.1713	-.1865	-.2596	-.3440	-.2975	.2332	.1681	-.0410	-.1514	-.1063	.0080	.0244
30.000			.7115	.2106	-.1593	-.2342	-.3186	-.2419	.2650	.0921	-.1023	-.1328	-.0652	.0147	.0241
60.000			.7097	.2111	-.1583	-.2286	-.3316	.0903	.3934	-.1194	-.1841	-.1310	.0157	.0455	.0354
90.000		1.0700	.6672	.1738	-.1901	-.2632	-.3522	.2108	.5468		-.4395	-.2242	.0419	-.0066	-.0222
120.000			.5962	.1057	-.2437	-.3133	-.3941	.0696	.2434	-.2712	-.3595	-.1711	.1391	.0785	-.0189
135.000								-.2428		-.0054		-.2504		.0469	
150.000			.5405	.0487	-.2834	-.3504	-.3918	-.1567	.1758	.2697	.1495	-.2105	.0419	-.0657	-.0800
165.000				.0145	-.3088	-.3725	-.4491	-.0258	.1185	.3187	.3231	-.0962	.0124	-.0505	-.0575
180.000	1.1930	.9060	.4762	-.0087	-.3225	-.3860	-.3568	-.0169	.0873	.2896	.3720	-.2450	-.0322	-.0797	-.0892
270.000		.8874							.6021						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(8) = 3.930 BETAO (4) = -3.990

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0133	.0772	.0248
30.000	-.0010	.1065	.0292
60.000	.0213	.1636	.0801
90.000	.0529	.1564	
120.000	.1177	.2183	.5860
135.000	.1310	.3008	.4236
150.000	.1261	.3008	.4562
165.000	.1415	.3051	.5094
180.000	.1217	.2624	.3701

ALPHAO(8) = 3.930 BETAO (5) = -2.000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2060	1.0780	.6763	.1784	-.1867	-.2595	-.3430	-.2947	.2273	.1838	-.0316	-.1456	-.0945	.0249	.0396
30.000			.6894	.1881	-.1847	-.2529	-.3369	-.2860	.2314	.1328	-.1075	-.1415	-.0563	.0223	.0324
60.000			.6663	.1659	-.1951	-.2641	-.3615	.0215	.4143	-.0977	-.1767	-.1202	-.0003	.0277	.0262
90.000		1.0270	.6177	.1259	-.2259	-.2984	-.3843	.1414	.5557		-.4608	-.2084	.0156	-.0258	-.0353
120.000			.5598	.0684	-.2692	-.3341	-.3848	.0659	.2617	-.2482	-.3370	-.1371	.1037	.0398	-.0487
135.000								-.1036		.0444		-.2536		.0093	
150.000			.5210	.0313	-.2957	-.3621	-.3710	-.0684	.1589	.2657	.0865	-.2032	.0238	-.0854	-.0980
165.000				.0131	-.3176	-.3756	-.3846	-.0058	.0874	.2966	.2966	-.1259	-.0008	-.0567	-.0649
180.000	1.2060	.9091	.4795	.0000	-.3234	-.3817	-.2955	-.0091	.0969	.2777	.3435	-.1329	-.0353	-.0521	-.0696
270.000		.9370							.5745						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0109	.0791	.0314
30.000	-.0068	.1056	.0412
60.000	.0040	.1470	.0905
90.000	.0317	.1514	
120.000	.0999	.2080	.4718
135.000	.1043	.2669	.3419
150.000	.0848	.2612	.3527
165.000	.1126	.2665	.4571
180.000	.1002	.2282	.3467

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (R81T32)

ALPHAO(8) = 3.940 BETAO (6) = .040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2050	1.0770	.6746	.1761	-.1836	-.2554	-.3415	-.2954	.2336	.1853	-.0264	-.1336	-.0892	.0304	.0429
30.000			.6580	.1583	-.2014	-.2722	-.3537	-.3067	.2325	.1475	-.1089	-.1429	-.0596	.0199	.0319
60.000			.6156	.1182	-.2288	-.2940	-.3883	.0591	.3925	-.0620	-.1688	-.0964	-.0123	.0192	.0183
90.000		.9760	.5661	.0718	-.2619	-.3293	-.4137	.1028	.5655		-.4983	-.1884	-.0258	-.0557	-.0447
120.000			.5166	.0328	-.2961	-.3587	-.3750	.0468	.2642	-.2190	-.3000	-.1150	.0619	.0002	-.0649
135.000								-.0251		.0801		-.2192		-.0193	
150.000			.4947	.0152	-.3166	-.3755	-.4425	-.0169	.1531	.2594	.0457	-.2106	-.0304	-.1065	-.1267
165.000				.0134	-.3159	-.3806	-.4058	-.0041	.0959	.2741	.2710	-.1331	-.0192	-.0581	-.0727
180.000	1.2050	.9010	.4814	.0100	-.3182	-.3834	-.4304	-.0072	.1084	.2776	.3351	-.1194	-.0271	-.0431	-.0600
270.000		.9839							.5534						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0066	.0549	.0312
30.000	-.0079	.0731	.0286
60.000	-.0054	.1227	.0851
90.000	.0330	.1219	
120.000	.0988	.1848	.3266
135.000	.0873	.2104	.2185
150.000	.0778	.1961	.2116
165.000	.1029	.2144	.2596
180.000	.1070	.2147	.2301

ALPHAO(8) = 4.030 BETAO (7) = 2.050

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1990	1.0750	.6732	.1729	-.1861	-.2595	-.3432	-.2933	.2921	.1792	-.0339	-.1471	-.0911	.0237	.0394
30.000			.6262	.1285	-.2210	-.2949	-.3699	-.3169	.2741	.1610	-.1354	-.1499	-.0733	.0166	.0289
60.000			.5680	.0718	-.2614	-.3272	-.4211	.0567	.3383	-.0239	-.2064	-.0647	-.0368	-.0009	.0036
90.000		.9278	.5127	.0255	-.2947	-.3643	-.4415	.0418	.5827		-.5373	-.1349	-.0793	-.0728	-.0450
120.000			.4743	.0005	-.3242	-.3867	-.3972	.0384	.2595	-.1728	-.2872	-.0507	.0222	-.0398	-.0835
135.000								-.0345		.1346		-.1958		-.0488	
150.000			.4705	-.0082	-.3290	-.3892	-.4724	-.0386	.1439	.2967	-.0007	-.2575	-.0556	-.1277	-.1297
165.000				-.0073	-.3265	-.3892	-.4636	-.0309	.1364	.3142	.2473	-.1805	-.0340	-.0661	-.0721
180.000	1.1990	.8984	.4746	-.0065	-.3280	-.3874	-.4597	-.0281	.1382	.3039	.3326	-.1302	-.0342	-.0540	-.0794
270.000		1.0290							.5483						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(8) = 4.030 BETAO (7) = 2.050

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0111	.0818	.0311
30.000	-.0158	.1103	.0182
60.000	-.0165	.1301	.0640
90.000	.0409	.1203	
120.000	.0904	.1663	.2701
135.000	.0850	.1827	.1575
150.000	.0820	.1637	.1087
165.000	.0915	.2010	.2634
180.000	.0987	.2197	.2077

ALPHAO(8) = 4.020 BETAO (8) = 4.070

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1880	1.0580	.6593	.1672	-.1921	-.2667	-.3451	-.2940	.2522	.1589	-.0450	-.1575	-.1230	.0010	.0191
30.000			.5874	.0966	-.2478	-.3161	-.3909	-.3158	.3329	.1592	-.1447	-.1725	-.0966	.0013	.0121
60.000			.5162	.0339	-.2931	-.3540	-.4391	.0164	.4000	-.0110	-.2206	-.0779	-.0575	-.0162	-.0120
90.000		.8799	.4646	-.0037	-.3252	-.3855	-.4599	.0177	.5854		-.5300	-.1178	-.1070	-.0921	-.0490
120.000			.4372	-.0321	-.3430	-.4021	-.3996	.0068	.2443	-.1322	-.2703	-.0672	-.0154	-.0692	-.0909
135.000								-.0460		.1635		-.2124		-.0844	
150.000			.4446	-.0375	-.3466	-.4013	-.4646	-.0521	.1320	.2950	-.0165	-.3426	-.1013	-.1799	-.1467
165.000				-.0215	-.3387	-.3967	-.4697	-.0311	.1394	.3089	.2341	-.1849	-.0624	-.0828	-.0873
180.000	1.1880	.9032	.4751	-.0128	-.3272	-.3863	-.4646	-.0208	.1525	.3082	.3417	-.1875	-.0466	-.0983	-.0992
270.000		1.0770							.5402						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0172	.0763	.0253
30.000	-.0146	.1128	.0150
60.000	-.0049	.1223	.0477
90.000	.0500	.1223	
120.000	.0749	.1542	.2171
135.000	.0598	.1550	.1238
150.000	.0552	.1211	.0618
165.000	.0758	.1773	.2259
180.000	.0802	.1966	.2393

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHA0(8) = 4.010 BETA0 (9) = 6.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1700	1.0490	.6572	.1645	-.1957	-.2686	-.3542	-.3051	.1877	.1245	-.0610	-.1571	-.1477	-.0462	-.0055
30.000			.5566	.0693	-.2678	-.3377	-.4116	-.3337	.3048	.1530	-.1426	-.1875	-.1184	-.0240	-.0030
60.000			.4714	-.0066	-.3270	-.3868	-.4111	-.0223	.3903	-.0104	-.2360	-.0969	-.0792	-.0307	-.0210
90.000		.8340	.4198	-.0441	-.3522	-.4116	-.4796	.0293	.5812		-.4993	-.0891	-.1179	-.1095	-.0550
120.000			.4001	-.0725	-.3649	-.4225	-.4263	-.0022	.2390	-.1034	-.2576	-.0906	-.0566	-.1026	-.0963
135.000								-.0716		.1751		-.2498		-.1188	
150.000			.4119	-.0591	-.3657	-.4134	-.2230	-.0028	.0859	.2696	-.0364	-.4219	-.1436	-.2359	-.1416
165.000				-.0343	-.3440	-.4083	-.3102	-.1	.1106	.2791	.2229	-.1849	-.1023	-.1072	-.1163
180.000	1.1700	.8881	.4622	-.0207	-.3366	-.3965	-.4096	-.	.1527	.2750	.3392	-.3926	-.1028	-.1478	-.1276
270.000		1.1160							.5422						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0153	.0755	-.0090
30.000	-.0071	.0951	.0005
60.000	.0017	.1124	.0407
90.000	.0433	.1216	
120.000	.0605	.1485	.2268
135.000	.0422	.1477	.1291
150.000	.0358	.1111	.0196
165.000	.0572	.1492	.2462
180.000	.0539	.1577	.2690

ALPHA0(8) = 4.060 BETA0 (10) = 8.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1380	1.0160	.6374	.1524	-.2007	-.2770	-.3610	-.3166	.1159	.0636	-.0816	-.1590	-.1709	-.0933	-.0459
30.000			.5122	.0363	-.2886	-.3636	-.4247	-.3699	.2110	.1362	-.1326	-.1893	-.1361	-.0508	-.0148
60.000			.4201	-.0445	-.3589	-.4175	-.4116	-.0420	.3601	-.0181	-.2408	-.1141	-.1042	-.0519	-.0266
90.000		.7812	.3726	-.0819	-.3803	-.4366	-.2901	-.0155	.5687		-.4031	-.0672	-.1125	-.1117	-.0554
120.000			.3580	-.0932	-.3887	-.4448	-.3136	-.0641	.2103	-.0588	-.2199	-.1374	-.0985	-.1368	-.1109
135.000								-.0893		.1744		-.2767		-.1551	
150.000			.3834	-.0824	-.3813	-.4338	-.1449	-.0659	.0488	.2338	-.0480	-.4751	-.1768	-.2533	-.1654
165.000				-.0623	-.3660	-.4247	-.1717	-.0628	.0967	.2339	.2076	-.2253	-.1431	-.1807	-.1344
180.000	1.1380	.7863	.4524	-.0286	-.3454	-.4069	-.4762	-.0407	.1236	.2334	.3000	-.4069	-.1617	-.2303	-.1708
270.000		1.1540							.5390						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(8) = 4.060 BETAO (10) = 8.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0191	.0350	-.0547
30.000	.0017	.0762	-.0203
60.000	-.0019	.1079	.0327
90.000	.0353	.1259	
120.000	.0481	.1431	.2576
135.000	.0327	.1485	.1436
150.000	.0219	.1092	.0110
165.000	.0296	.1307	.2576
180.000	.0203	.1341	.2509

ALPHAO(8) = 4.050 BETAO (11) = 10.160

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1050	.9763	.6159	.1377	-.2134	-.2883	-.3740	-.3117	.0372	-.0043	-.1266	-.1555	-.1813	-.1456	-.0595
30.000			.4674	.0005	-.3230	-.3903	-.4634	-.2660	.1476	.1180	-.1406	-.1943	-.1487	-.0806	-.0012
60.000			.3709	-.0842	-.3890	-.4372	-.4096	-.1144	.1981	-.0110	-.2238	-.1358	-.1358	-.0819	-.0225
90.000		.7283	.3285	-.1225	-.4037	-.4570	-.3860	-.0348	.5903		-.4594	-.0809	-.1208	-.1129	-.0722
120.000			.3203	-.1284	-.4080	-.4596	-.1761	-.1075	.1499	-.0433	-.2533	-.1637	-.1197	-.1686	-.1253
135.000								-.0944		.1213		-.3092		-.1843	
150.000			.3494	-.1107	-.3992	-.4527	-.1378	-.0905	.0113	.1922	-.0720	-.4793	-.2202	-.2998	-.1908
165.000				-.0774	-.3781	-.4372	-.1365	-.0921	.0988	.1968	.1761	-.2637	-.1795	-.2292	-.1580
180.000	1.1050	.7408	.4434	-.0398	-.3497	-.4091	-.4887	-.0356	.0520	.1850	.2498	-.3641	-.1883	-.2728	-.2294
270.000		1.1910							.5420						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0467	.0050	-.1152
30.000	-.0363	.0477	-.0640
60.000	-.0263	.1052	.0351
90.000	.0113	.1340	
120.000	.0357	.1425	.2841
135.000	.0216	.1428	.1530
150.000	.0066	.0942	-.0060
165.000	-.0037	.1178	.2607
180.000	-.0332	.0801	.2229

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(9) = 5.980 BETAO (1) = -9.980

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0890	1.0140	.6616	.1847	-.1809	-.2531	-.3391	-.2734	.1138	.0108	-.0978	-.1201	-.1465	-.1252	-.0865
30.000			.8056	.3205	-.0683	-.1493	-.2404	.0812	.1627	-.0311	-.1022	-.0676	-.0362	-.0383	-.0425
60.000			.8617	.3723	-.0247	-.1031	-.1328	.3558	.3951	-.1480	-.1477	-.0808	.0498	.0662	.0416
90.000		1.1660	.8078	.3233	-.0690	-.1476	-.2385	.3972	.5044		-.3180	-.1690	.0163	-.0391	-.0497
120.000			.6659	.1900	-.1 32	-.2526	-.3403	.0782	.0567	-.2475	-.3708	-.2367	.2021	.2003	.1144
135.000								-.0454		-.2136		-.1286		.1529	
150.000			.5342	.0626	-.2796	-.3500	-.4325	-.0816	-.0846	.2216	.1017	-.1713	.0439	-.0155	.0017
165.000				-.0222	-.3432	-.4106	-.4455	-.3742	.0180	.2961	.3176	.0264	-.0504	-.0726	-.0180
180.000	1.0890	.8329	.3935	-.0652	-.3760	-.4312	-.4273	-.2525	.1229	.3271	.3545	-.3771	-.0126	-.1569	-.1027
270.000		.7109							.5718						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0116	-.0024	-.1001
30.000	.0463	1089	-.0401
60.000	.1034	.2089	.0353
90.000	.0877	.0508	
120.000	.2506	.2713	.8441
135.000	.2647	.3924	.5848
150.000	.2217	.3857	.6398
165.000	.2222	.3701	.6611
180.000	.1690	.2946	.4501

ALPHAO(9) = 5.960 BETAO (2) = -7.980

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1250	1.0550	.6888	.2032	-.1618	-.2410	-.3252	-.2676	.1673	.0788	-.0694	-.1166	-.1277	-.0845	-.0357
30.000			.7949	.3032	-.0843	-.1637	-.2545	-.1538	.2113	.0253	-.0881	-.0829	-.0348	-.0229	-.0083
60.000			.8222	.3295	-.0629	-.1413	-.2303	.2793	.4061	-.1211	-.1362	-.0956	.0414	.0517	.0494
90.000		1.1290	.7581	.2712	-.1140	-.1911	-.2634	.3789	.4927		-.3576	-.1938	.0622	.0405	.0099
120.000			.6290	.1472	-.2120	-.2832	-.3710	.0326	.0597	-.1786	-.3552	-.2081	.1650	.1584	.0814
135.000								-.0779		-.0844		-.2177		.1158	
150.000			.5220	.0430	-.2939	-.3585	-.4445	-.1474	.0432	.2671	.1182	-.2190	.0314	-.0288	-.0048
165.000				-.0211	-.3447	-.4056	-.4391	-.3141	.0973	.3136	.3326	-.0131	-.0017	-.0747	-.0091
180.000	1.1250	.8447	.4077	-.0598	-.3664	-.4251	-.4555	-.0984	.1319	.3274	.3697	-.4097	-.0399	-.0917	-.0523
270.000		.7640							.6071						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(9) = 5.960 BETAO (2) = -7.980

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0055	.0366	-.0278
30.000	.0401	.1266	.0043
60.000	.0896	.2054	.0666
90.000	.1096	.1500	
120.000	.1980	.2733	.7479
135.000	.2139	.3633	.5316
150.000	.1873	.3587	.5880
165.000	.1958	.3526	.6327
180.000	.1572	.2881	.4295

ALPHAO(9) = 5.940 BETAO (3) = -5.960

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1510	1.0860	.7073	.2170	-.1494	-.2309	-.3168	-.2619	.2222	.1382	-.0412	-.1079	-.0839	-.0365	.0079
30.000			.7790	.2824	-.1004	-.1806	-.2683	-.1824	.2524	.0799	-.1035	-.0666	-.0347	-.0028	.0291
60.000			.7759	.2824	-.1019	-.1755	-.2832	.1885	.4168	-.0933	-.1223	-.0607	.0240	.0503	.0466
90.000		1.0860	.7034	.2168	-.1555	-.2324	-.2691	.3402	.4920		-.3917	-.2121	.0135	-.0164	-.0198
120.000			.5887	.1085	-.2412	-.3107	-.3930	-.0117	.1199	-.2191	-.3725	-.2049	.1407	.1293	.0485
135.000								-.0966		-.0708		-.2492		.0937	
150.000			.5012	.0225	-.3072	-.3704	-.4426	-.2595	.0830	.2706	.1205	-.2428	.0317	-.0349	-.0255
165.000				-.0298	-.3484	-.4106	-.4159	-.2115	.1195	.3082	.3274	-.0442	.0470	-.0478	-.0163
180.000	1.1510	.8466	.4164	-.0595	-.3580	-.4187	-.4315	-.0617	.0889	.3021	.3527	-.3676	-.0373	-.0849	-.0401
270.000		.8130							.5710						

X/LT	.7460	.8530	.9280
PHI			
.000	.0088	.0981	.0069
30.000	.0262	.1310	.0177
60.000	.0575	.1865	.0670
90.000	.0741	.1354	
120.000	.1564	.2612	.6995
135.000	.1748	.3429	.4925
150.000	.1603	.3365	.5438
165.000	.1752	.3311	.5778
180.000	.1490	.2774	.3935

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(9) = 5.980 BETAO (4) = -3.980

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1730	1.1070	.7195	.2220	-.1446	-.2214	-.3102	-.2628	.2335	.1822	-.0172	-.1129	-.0533	.0043	.0317
30.000			.7560	.2560	-.1237	-.1995	-.2876	-.2130	.2840	.1157	-.1048	-.0712	-.0373	.0256	.0389
60.000			.7320	.2353	-.1402	-.2107	-.3157	.1225	.4314	-.0737	-.1312	-.0585	.0146	.0425	.0389
90.000		1.0480	.6555	.1696	-.1975	-.2698	-.3067	.2676	.5041		-.4151	-.2137	-.0085	-.0352	-.0288
120.000			.5584	.0755	-.2703	-.3372	-.4168	-.0124	.1727	-.2267	-.3972	-.2059	.1099	.1001	.0133
135.000								-.0498		-.0448		-.2873		.0724	
150.000			.4899	.0080	-.3189	-.3827	-.3932	-.1532	.1018	.2598	.0988	-.2401	.0235	-.0344	-.0543
165.000				-.0298	-.3430	-.4039	-.3832	-.0535	.1029	.2808	.2869	-.1095	.0069	-.0211	-.0308
180.000	1.1730	.8524	.4250	-.0507	-.3509	-.4120	-.1604	-.0506	.0593	.2606	.3251	-.1765	-.0388	-.0475	-.0584
270.000		.8692							.5747						

X/LT	.7460	.8530	.9280
PHI			
.000	.0040	.0792	.0309
30.000	.0209	.1167	.0337
60.000	.0368	.1650	.0689
90.000	.0576	.1286	
120.000	.1295	.2483	.6184
135.000	.1447	.3162	.4393
150.000	.1375	.3144	.4709
165.000	.1561	.3144	.5125
180.000	.1329	.2727	.3691

ALPHAO(9) = 5.970 BETAO (5) = -1.970

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1860	1.1200	.7270	.2269	-.1454	-.2172	-.3064	-.2634	.2501	.2004	-.0035	-.1112	-.0243	.0189	.0424
30.000			.7313	.2307	-.1444	-.2162	-.3046	-.2567	.2838	.1491	-.1021	-.0715	-.0211	.0264	.0404
60.000			.6862	.1897	-.1759	-.2436	-.3515	.0857	.4377	-.0455	-.1361	-.0261	.0048	.0300	.0273
90.000		1.0080	.5074	.1167	-.2357	-.3046	-.3691	.2160	.5116		-.4383	-.1771	-.0204	-.0532	-.0305
120.000			.5233	.0367	-.2946	-.3608	-.4415	-.0157	.1992	-.2579	-.4090	-.1678	.0903	.0593	-.0176
135.000								-.0281		-.0338		-.2768		.0334	
150.000			.4731	-.0096	-.3249	-.3875	-.3925	-.0793	.1140	.2589	.0704	-.2225	.0122	-.0578	-.0691
165.000				-.0303	-.3483	-.4012	-.2660	-.0407	.0567	.2781	.2694	-.1353	-.0019	-.0295	-.0327
180.000	1.1860	.8523	.4285	-.0521	-.3528	-.4080	-.1809	-.0566	.0639	.2602	.3217	-.1449	-.0304	-.0284	-.0347
270.000		.9143							.5526						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(9) = 5.970 BETAO (5) = -1.970

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	.0117	.0857	.0481
30.000	.0143	.1117	.0371
60.000	.0181	.1462	.0687
90.000	.0512	.1171	
120.000	.1130	.2363	.4935
135.000	.1174	.2845	.3601
150.000	.1014	.2778	.3728
165.000	.1243	.2798	.4531
180.000	.1137	.2397	.3354

ALPHAO(9) = 5.980 BETAO (6) = .030

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1910	1.1220	.7280	.2289	-.1387	-.2153	-.3055	-.2609	.2653	.2084	.0024	-.1066	-.0045	.0319	.0496
30.000			.7014	.2031	-.1661	-.2391	-.3230	-.2776	.2843	.1730	-.1037	-.0753	-.0092	.0255	.0411
60.000			.6350	.1410	-.2127	-.2789	-.3795	.0819	.4102	-.0117	-.1473	.0039	.0034	.0188	.0180
90.000		.9616	.5590	.0682	-.2685	-.3362	-.4209	.1047	.5246		-.4545	-.1193	-.0535	-.0867	-.0328
120.000			.4860	.0058	-.3146	-.3750	-.4548	-.0097	.2263	-.2840	-.3998	-.1408	.0575	.0206	-.0292
135.000								-.0281		.0101		-.2372		-.0025	
150.000			.4530	-.0235	-.3382	-.3963	-.4106	-.0353	.1126	.2323	.0462	-.2300	-.0294	-.0818	-.0888
165.000				-.0365	-.3466	-.4026	-.1722	-.0415	.0516	.2738	.2456	-.1411	-.0115	-.0315	-.0333
180.000	1.1910	.8524	.4326	-.0520	-.3463	-.4059	-.2429	-.0479	.0693	.2663	.3145	-.1336	-.0174	-.0225	-.0235
270.000		.9659							.5270						

X/LT	.7480	.8530	.9280
PHI			
.000	.0155	.0552	.0498
30.000	.0129	.0799	.0305
60.000	.0098	.1146	.0472
90.000	.0470	.0723	
120.000	.1129	.2086	.3427
135.000	.1008	.2293	.2375
150.000	.0909	.2167	.2285
165.000	.1208	.2365	.2889
180.000	.1259	.2347	.2485

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHA0(9) = 5.970 BETA0 (7) = 2.030

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1830	1.1160	.7226	.2235	-.1423	-.2234	-.3092	-.2586	.3150	.1945	-.0063	-.1072	-.0282	.0235	.0433
30.000			.5636	.1693	-.1911	-.2658	-.3476	-.2894	.3166	.1786	-.1082	-.1101	-.0283	.0222	.0333
60.000			.5807	.0903	-.2515	-.3131	-.4052	.0458	.4203	.0071	-.1754	-.0185	-.0099	.0099	.0089
90.000		.9090	.5016	.0218	-.3059	-.3717	-.4216	.1306	.5239		-.4460	-.0311	-.0467	-.0818	-.0339
120.000			.4443	-.0227	-.3394	-.4001	-.4730	-.0871	.2503	-.2445	-.3638	-.1080	.0068	-.0170	-.0465
135.000								-.0345		.0742		-.2334		-.0328	
150.000			.4241	-.0545	-.3557	-.4108	-.4775	-.0730	.1402	.2789	.0039	-.2728	-.0632	-.1025	-.0909
165.000				-.0567	-.3524	-.4136	-.4044	-.0599	.0051	.2919	.2432	-.1847	-.0347	-.0437	-.0383
180.000	1.1830	.8487	.4269	-.0565	-.3559	-.4108	-.4671	-.0499	.1174	.2852	.3123	-.1500	-.0350	-.0293	-.0450
270.000		1.0110							.5093						

X/LT	.7460	.8530	.9280
PHI			
.000	.0081	.0848	.0439
30.000	.0030	.1100	.0295
60.000	-.0017	.1200	.0323
90.000	.0452	.0779	
120.000	.1070	.1869	.2674
135.000	.0942	.1992	.1649
150.000	.0956	.1786	.1238
165.000	.1082	.2186	.2785
180.000	.1164	.2348	.2194

ALPHA0(9) = 5.950 BETA0 (8) = 4.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1730	1.1000	.7120	.2175	-.1513	-.2289	-.3122	-.2597	.2716	.1747	-.0198	-.1128	-.0685	-.0051	.0340
30.000			.6264	.1361	-.2140	-.2881	-.3665	-.2926	.3324	.1745	-.1104	-.1345	-.0647	-.0005	.0233
60.000			.5305	.0466	-.2857	-.3488	-.3771	.0139	.3958	.0219	-.1822	-.0483	-.0429	-.0016	.0064
90.000		.8643	.4533	-.0139	-.3328	-.3951	-.3910	.0369	.5355		-.3848	.0169	-.0388	-.0694	-.0292
120.000			.4099	-.0511	-.3551	-.4131	-.4817	-.0251	.2475	-.1906	-.2921	-.0941	-.0315	-.0477	-.0612
135.000								-.0699		.1287		-.2176		-.0552	
150.000			.4069	-.0719	-.3584	-.4192	-.4804	-.0961	.1149	.2830	-.0131	-.3208	-.0872	-.1299	-.1205
165.000				-.0571	-.3577	-.4182	-.4424	-.0615	.0978	.2909	.2273	-.1829	-.0543	-.0495	-.0540
180.000	1.1730	.8536	.4279	-.0475	-.3533	-.4133	-.4846	-.0480	.1221	.2784	.3296	-.1566	-.0533	-.0475	-.0635
270.000		1.0600							.5054						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(9) = 5.930 BETAO (8) = 4.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0000	.0840	.0365
30.000	-.0028	.1058	.0222
60.000	-.0005	.1212	.0237
90.000	.0509	.1025	
120.000	.0963	.1728	.2184
135.000	.0807	.1749	.1267
150.000	.0696	.1353	.0653
165.000	.0938	.1468	.2305
180.000	.0992	.2025	.2434

ALPHAO(9) = 5.940 BETAO (9) = 6.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1500	1.0850	.7023	.2146	-.1526	-.2315	-.3171	-.2698	.1164	.1344	-.0397	-.1157	-.1015	-.0459	.0032
30.000			.5890	.1057	-.2395	-.3127	-.3889	-.3221	.3029	.1615	-.1126	-.1519	-.0997	-.0410	-.0050
60.000			.4809	.0073	-.3164	-.3792	-.3684	-.0804	.3765	.0469	-.1749	-.0712	-.0715	-.0138	-.0033
90.000		.8153	.4090	-.0489	-.3599	-.4163	-.3218	-.0345	.5009		-.2808	.0321	-.0348	-.0564	-.0386
120.000			.3750	-.0774	-.3779	-.4280	-.4717	-.0136	.2049	-.1475	-.2296	-.1010	-.0684	-.0808	-.0703
135.000								-.0940		.1495		-.2078		-.0924	
150.000			.3809	-.0836	-.3810	-.4288	-.2505	-.0947	.0901	.2649	-.0410	-.3734	-.1137	-.1905	-.1225
165.000				-.0726	-.3693	-.4270	-.2723	-.0709	.0876	.2730	.2163	-.2001	-.0819	-.0762	-.0870
180.000	1.1900	.8345	.4151	-.0806	-.3629	-.4173	-.4833	-.0512	.1162	.2585	.3055	-.31[illegible]	-.0808	-.0862	-.1009
270.000		1.0930							.5048						

X/LT	.7460	.8530	.9280
PHI			
.000	.0102	.0895	.0062
30.000	.0033	.0959	.0121
60.000	.0197	.1195	.0380
90.000	.0598	.1256	
120.000	.0769	.1539	.2093
135.000	.0614	.1554	.1293
150.000	.0800	.1174	.0247
165.000	.0730	.1561	.2580
180.000	.0730	.1678	.2696

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHA0(9) = 5.920 BETA0 (10) = 8.130

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/ T	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
RHI															
.000	1.1260	1.0590	.6884	.2015	-.1621	-.2409	-.3303	-.2827	.0978	.0753	-.0668	-.1219	-.1356	-.0870	-.0371
30.000			.5446	.0688	-.2663	-.3413	-.4166	-.3473	.2277	.1518	-.1130	-.1644	-.1383	-.0927	-.0340
60.000			.4231	-.0333	-.3529	-.4098	-.3813	-.1375	.3355	.0653	-.1645	-.1029	-.1059	-.0339	-.0101
90.000		.7627	.3637	-.0936	-.3896	-.4253	-.2618	-.0648	.4551		-.2286	-.0006	-.0577	-.0615	-.0565
120.000			.3383	-.1107	-.3965	-.4508	-.4539	-.0249	.1671	-.0830	-.1795	-.1271	-.0948	-.1076	-.0989
135.000								-.1021		.1600		-.2427		.1290	
150.000			.3496	-.1115	-.3985	-.4444	-.2158	-.0833	.0645	.2349	-.0642	-.4206	-.1498	-.2106	-.1361
165.000				-.0909	-.3863	-.4444	-.1918	-.0350	.0940	.2305	.1905	-.2181	-.1168	-.1399	-.1209
180.000	1.1260	.7388	.4098	-.0704	-.3720	-.4329	-.4941	-.0698	.0887	.2157	.2675	-.3798	-.1179	-.1897	-.1372
270.000		1.1400							.5102						

X/LT	.7480	.8530	.9280
RHI			
.000	-.0085	.0381	-.0308
30.000	.0141	.0571	-.0051
60.000	.0287	.1142	.0569
90.000	.0482	.1433	
120.000	.0626	.1572	.2249
135.000	.0505	.1521	.1336
150.000	.0365	.1109	.0066
165.000	.0489	.1367	.2591
180.000	.0329	.1362	.2465

ALPHA0(9) = 5.980 BETA0 (11) = 10.150

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
RHI															
.000	1.0800	1.0170	.6626	.1851	-.1753	-.2500	-.3390	-.2744	.0182	.0039	-.0954	-.1308	-.1667	-.1378	-.1067
30.000			.4973	.0300	-.2987	-.3695	-.4329	-.3266	.1548	.1356	-.1045	-.1861	-.1828	-.1265	-.0320
60.000			.3757	-.0817	-.3862	-.4015	-.3552	-.0978	.2607	.0101	-.1952	-.1750	-.1671	-.0732	.0067
90.000		.7109	.3181	-.1267	-.4139	-.4674	-.3999	-.0435	.3350		-.4160	-.0832	-.0962	-.0918	-.0714
120.000			.3002	-.1408	-.4172	-.4694	-.2515	-.0909	.1910	-.0883	-.2816	-.1241	-.1094	-.1410	-.0921
135.000								-.1123		.1512		-.3126		-.1490	
150.000			.3196	-.1357	-.4139	-.4636	-.1631	-.1112	.0118	.1807	-.0675	-.4495	-.1903	-.2480	-.1545
165.000				-.1083	-.4012	-.4578	-.1343	-.1049	.0829	.1923	.1652	-.2537	-.1653	-.1838	-.1176
180.000	1.0800	.6856	.3975	-.0812	-.3806	-.4385	-.5007	-.0001	.0443	.1537	.1992	-.3558	-.1629	-.2565	-.1828
270.000		1.1730							.5135						

X/LT	.7480	.8530	.9280
RHI			

ARC11-716 IA14 DX+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHA0(9) = 5.980 BETA0 (11) = 10.150

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L?	.7480	.8530	.9290
PHI			
.000	-.0187	.0004	-.0731
30.000	-.0249	.0390	-.0282
60.000	-.0072	.1108	.0612
90.000	.0138	.1450	
120.000	.0530	.1568	.2430
135.000	.0440	.1535	.1403
150.000	.0371	.1116	-.0023
165.000	.0304	.1254	.2574
180.000	-.0035	.1041	.2250

ALPHA0(10) = 8.080 BETA0 (1) = -9.950

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L?	.0001	.0082	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.0640	1.0510	.7103	.2373	-.1305	-.2033	-.2898	-.2301	.0430	.0202	-.0754	-.0858	-.1150	-.1086	-.1102
30.000			.3535	.3703	-.[illegible]6	-.0972	-.1924	.1007	.1990	.0046	-.0679	-.0327	-.0074	-.0061	-.0067
60.000			.9859	.3991	.0039	-.0705	-.1559	.3639	.4337	-.0979	-.0975	-.0578	.0566	.0740	.0712
90.000		1.[illegible]410	.7919	.3140	-.0674	-.1465	-.1315	.4067	.4644		-.3013	-.1660	.0045	.0727	.0676
120.000			.6203	.1512	-.2028	-.2720	-.3049	.0338	-.0359	-.1864	-.3214	-.1901	.0948	.1564	.1233
135.000								-.0568		-.1845		-.1904		.1531	
150.000			.4754	.0110	-.3095	-.3741	-.4288	-.1457	-.1656	.1762	.0313	-.1715	.0092	-.0008	.0422
165.000				-.0565	-.3681	-.4299	-.4570	-.2830	-.0411	.2778	.2793	.0229	-.0742	-.0613	.0307
180.000	1.0640	.7770	.3436	-.0979	-.3975	-.4446	-.4524	-.2690	.1021	.3287	.3521	-.3822	-.0364	-.1035	-.0343
270.000		.6655							.0537						

X/L?	.7480	.8530	.9280
PHI			
.000	.0419	.0002	-.0578
30.000	.0706	.1272	.0102
60.000	.1369	.2360	.0966
90.000	.1589	.2226	
120.000	.2382	.2812	.6851
135.000	.2606	.3861	.5363
150.000	.2254	.3566	.6041
165.000	.2213	.3510	.6624
180.000	.1740	.2914	.4479

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(10) = 8.110 BETAO (2) = -7.950

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0970	1.0890	.7358	.2560	-.1224	-.1973	-.2860	-.2280	.1668	.0976	-.0387	-.0691	-.0876	-.0758	-.0577
30.000			.8404	.3532	-.0407	-.1211	-.2133	-.1299	.2469	.0641	-.0603	-.0203	-.0026	.0000	.0052
60.000			.8404	.3555	-.0382	-.1151	-.2262	.3041	.4431	-.0692	-.0895	-.0460	.0492	.0619	.0540
90.000		1.1010	.7396	.2671	-.1186	-.1970	-.2265	.3826	.4507		-.3299	-.1773	.0151	.0741	.0616
120.000			.5843	.1108	-.2393	-.3107	-.3809	.0258	-.0318	-.1760	-.3284	-.2096	.0769	.1411	.1043
135.000								-.1072		-.0100		-.2523		.1218	
150.000			.4709	-.0042	-.3272	-.3914	-.4551	-.2629	-.0654	.2408	.0542	-.2220	.0026	-.0025	.0204
165.000				-.0627	-.3754	-.4334	-.4400	-.3149	.0618	.3032	.2954	-.0226	.0003	-.0380	.0199
180.000	1.0970	.7866	.3598	-.0924	-.3906	-.4459	-.4533	-.1436	.1144	.3200	.3578	-.4072	-.0324	-.0656	-.0114
270.000		.7363							.5187						

X/LT	.7460	.8530	.9280
PHI			
.000	.0026	.0562	-.0067
30.000	.0626	.1536	.0373
60.000	.1104	.2301	.0983
90.000	.1462	.2156	
120.000	.2044	.2837	.6683
135.000	.2270	.3869	.5102
150.000	.1972	.3549	.5752
165.000	.2059	.3436	.6102
180.000	.1671	.2865	.4176

ALPHAO(10) = 8.130 BETAO (3) = -5.940

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1200	1.1230	.7571	.2699	-.1100	-.1857	-.2770	-.2227	.2313	.1549	-.0101	-.0660	-.0751	-.0504	.0039
30.000			.8212	.3294	-.0610	-.1401	-.2327	-.1490	.2887	.1107	-.0593	-.0255	-.0119	-.0042	.0297
60.000			.7931	.3046	-.0807	-.1549	-.2690	.2398	.4495	-.0418	-.0878	-.0286	.0319	.0480	.0465
90.000		1.0530	.6851	.2107	-.1651	-.2397	-.2719	.3749	.4439		-.3581	-.1744	.0209	.0583	.0529
120.000			.5424	.0706	-.2710	-.3408	-.4196	.0155	.0232	-.1454	-.3422	-.2268	.0743	.1234	.0699
135.000								-.1477		.0090		-.2743		.0948	
150.000			.4445	-.0250	-.3441	-.4034	-.4150	-.2842	.0513	.2463	.0627	-.2629	.0079	-.0156	-.0036
165.000				-.0642	-.3791	-.4342	-.4193	-.1987	.0988	.2995	.2753	-.0565	.0319	-.0218	.0127
180.000	1.1200	.7860	.3638	-.0975	-.3851	-.4437	-.1689	-.0963	.0691	.2949	.3302	-.3785	-.0437	-.0588	-.0121
270.000		.7857							.4892						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(10) = 8.130 BETAO (3) = -5.940

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0263	.0874	.0289
30.000	.0554	.1481	.0496
60.000	.0776	.2004	.0832
90.000	.1230	.1822	
120.000	.1695	.2792	.6354
135.000	.1363	.3464	.4658
150.000	.1719	.3323	.5135
165.000	.1860	.3339	.5575
180.000	.1658	.2899	.3903

ALPHAO(10) = 7.980 BETAO (4) = -3.970

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1460	1.1460	.7725	.2784	-.0990	-.1795	-.2699	-.2263	.2507	.2021	.0151	-.0499	-.0405	-.0249	.0432
30.000			.8011	.3045	-.0800	-.1608	-.2497	-.1852	.3032	.1491	-.0757	-.0094	-.0038	.0103	.0549
60.000			.7505	.2592	-.1167	-.1900	-.3004	.1527	.4524	-.0200	-.0878	.0154	.0258	.0400	.0447
90.000		1.0220	.6413	.1637	-.1981	-.2727	-.3379	.3128	.4532		-.3823	-.1341	.0008	.0111	.0144
120.000			.5174	.0414	-.2917	-.3571	-.4326	-.0423	.0857	-.1526	-.3812	-.2138	.0761	.1059	.0521
135.000								-.2019		.0077		-.2854		.0791	
150.000			.4415	-.0315	-.3454	-.4070	-.3946	-.1943	.0875	.2566	.0457	-.2603	.0049	-.0158	-.0218
165.000				-.0603	-.3689	-.4270	-.3499	-.0737	.0905	.2675	.2492	-.1130	-.0002	.0052	.0031
180.000	1.1460	.7996	.3762	-.0865	-.3761	-.4273	-.1250	-.0765	.0417	.2650	.3251	-.1725	-.0528	-.0184	-.0174
270.000		.8401							.4997						

X/LT	.7460	.8530	.9280
PHI			
.000	.0261	.1010	.0501
30.000	.0457	.1409	.0476
60.000	.0572	.1820	.0724
90.000	.0898	.1342	
120.000	.1510	.2755	.6018
135.000	.1676	.3317	.4319
150.000	.1529	.3271	.4666
165.000	.1720	.3220	.5131
180.000	.1524	.2824	.3759

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(10) = 8.010 BETAO (5) = -1.970

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1540	1.1570	.7753	.2817	-.1003	-.1811	-.2699	-.2267	.2744	.2189	.0253	-.0518	.0006	.0253	.0511
30.000			.7710	.2754	-.1064	-.1864	-.2749	-.2257	.3202	.1726	-.0690	-.0202	.0058	.0340	.0509
60.000			.6994	.2073	-.1615	-.2342	-.3408	.0876	.4587	.0047	-.0906	.0317	.0289	.0340	.0290
90.000		.9759	.5877	.1053	-.2453	-.3135	-.3872	.2593	.4638		-.3705	-.0839	-.0089	-.0273	-.0101
120.000			.4803	.0058	-.3225	-.3842	-.4428	-.0427	.1195	-.1400	-.4150	-.1792	.0688	.0659	.0124
135.000								-.1316		.0429		-.2699		.0356	
150.000			.4229	-.0444	-.3609	-.4171	-.4020	-.1270	.0904	.2489	.0332	-.2401	.0011	-.0427	-.0420
165.000				-.0697	-.3777	-.4296	-.1337	-.0804	.0431	.2603	.2453	-.1376	-.0025	-.0119	-.0017
180.000	1.1540	.7959	.3770	-.0865	-.3812	-.4303	-.1098	-.0809	.0462	.2580	.3219	-.1648	-.0302	-.0114	-.0050
270.000		.8865							.5009						

X/LT	.7460	.8530	.9280
PHI			
.000	.0313	.0991	.0570
30.000	.0369	.1144	.0401
60.000	.0333	.1401	.0457
90.000	.0672	.1060	
120.000	.1256	.2549	.4636
135.000	.1233	.2867	.3472
150.000	.1044	.2711	.3595
165.000	.1352	.2790	.4415
180.000	.1239	.2431	.3292

ALPHAO(10) = 7.930 BETAO (6) = .060

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1640	1.1580	.7743	.2791	-.1024	-.1818	-.2746	-.2268	.2898	.2227	.0316	-.0512	.0159	.0299	.0543
30.000			.7384	.2444	-.1335	-.2114	-.2992	-.2539	.2997	.1952	-.0652	-.0340	.0082	.0304	.0497
60.000			.6463	.1577	-.2050	-.2711	-.3710	-.0439	.4627	.0246	-.1002	.0154	.0250	.0334	.0287
90.000		.9326	.5378	.0613	-.2854	-.3499	-.4040	.1259	.4861		-.3608	-.0365	.0025	-.0339	-.0118
120.000			.4501	-.0188	-.3454	-.4056	-.4749	-.0442	.1321	-.1394	-.4172	-.1527	.0385	.0336	.0010
135.000								-.0353		.0524		-.2589		.0132	
150.000			.4119	-.0572	-.3670	- 4237	-.3725	-.0816	.0717	.2487	.0214	-.2409	-.0361	-.0698	-.0609
165.000				-.0798	-.3790	-.4275	-.1388	-.0765	.0312	.2600	.2481	-.1453	-.0129	-.0177	-.0044
180.000	1.1640	.8003	.3833	-.0846	-.3775	-.4290	-.1817	-.0950	.0442	.2638	.3097	-.1430	-.0287	-.0071	.0014
270.000		.9402							.4792						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(10) = 7.930 BETAO (6) = .060

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0383	.0641	.0688
30.000	.0348	.0894	.0389
60.000	.0271	.1140	.0325
90.000	.0618	.0835	
120.000	.1244	.2151	.3334
135.000	.1108	.2363	.2341
150.000	.0979	.2225	.2244
165.000	.1327	.2441	.3014
180.000	.1380	.2436	.2584

ALPHAO(10) = 7.970 BETAO (7) = 2.050

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1580	1.1520	.7700	.2757	-.1091	-.1860	-.2756	-.2278	.3300	.2152	.0237	-.0620	-.0088	.0175	.0459
30.000			.6983	.2079	-.1568	-.2369	-.3213	-.2730	.3633	.1952	-.0724	-.0846	-.0193	.0121	.0352
60.000			.5894	.1057	-.2430	-.3096	-.3879	-.1875	.4779	.0530	-.1112	-.0279	.0083	.0320	.0304
90.000		.8822	.4862	.0154	-.3190	-.3797	-.3936	.0286	.5205		-.3535	-.0307	.0213	-.0137	-.0091
120.000			.4122	-.0509	-.3642	-.4189	-.4468	-.0383	.1481	-.1065	-.4046	-.1152	.0160	.0032	-.0159
135.000								-.0793		.0801		-.2485		-.0188	
150.000			.3865	-.0745	-.3794	-.4312	-.1671	-.0974	.0839	.2529	.0126	-.2529	-.0599	-.0868	-.0693
165.000				-.0874	-.3802	-.4312	-.1093	-.0795	.0588	.2655	.2412	-.1735	-.0316	-.0305	-.0115
180.000	1.1580	.7956	.3824	-.0869	-.3837	-.4317	-.2271	-.0795	.0596	.2632	.3079	-.1319	-.0326	-.0157	-.0159
270.000		.9868							.4714						

X/LT	.7460	.8530	.9280
PHI			
.000	.0276	.1080	.0606
30.000	.0187	.1187	.0499
60.000	.0180	.1203	.0458
90.000	.0637	.1093	
120.000	.1157	.1892	.2497
135.000	.1030	.2009	.1580
150.000	.0981	.1772	.1294
165.000	.1159	.2242	.2857
180.000	.1244	.2411	.2319

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(10) = 7.950 BETAO (9) = 4.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1470	1.1370	.7590	.2668	-.1130	-.1879	-.2775	-.2301	.2752	.1951	.0126	-.0610	-.0440	-.0276	.0397
30.000			.6591	.1753	-.1572	-.2598	-.3447	-.2954	.3614	.1959	-.0741	-.1117	-.0819	-.0424	.0206
60.000			.5406	.0528	-.2782	-.3435	-.3890	-.2476	.4732	.0784	-.1119	-.1089	-.0442	.0169	.0359
90.000		.8360	.4411	-.0236	-.3409	-.4109	-.3961	-.0086	.5361		-.3837	-.2245	.0232	.0077	-.0129
120.000			.3820	-.0761	-.3799	-.4354	-.4251	-.0451	.1650	-.0551	-.3651	-.1497	.0078	-.0035	-.0290
135.000								-.0932		.1302		-.2822		-.0145	
150.000			.3690	-.0928	-.3879	-.4412	-.2328	-.1048	.0916	.2659	.0158	-.3056	-.0786	-.0755	-.0887
165.000				-.0950	-.3886	-.4399	-.1225	-.0862	.0620	.2722	.2199	-.1986	-.0519	-.0234	-.0114
180.000	1.1470	.7960	.3778	-.0940	-.3834	-.4399	-.2921	-.0853	.0096	.2575	.2979	-.1361	-.0504	-.0229	-.0223
270.000		1.0330							.4649						

X/LT	.7460	.8530	.9280
PHI			
.000	.0268	.0970	.3507
30.000	.0067	.1160	.0561
60.000	.0265	.1559	.1120
90.000	.0694	.1671	
120.000	.1127	.1732	.2167
135.000	.1049	.1819	.1292
150.000	.0896	.1480	.0705
165.000	.1117	.2027	.2304
180.000	.1163	.2113	.2434

ALPHAO(10) = 7.920 BETAO (9) = 6.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1230	1.1220	.7525	.2643	-.1072	-.1929	-.2820	-.2332	.2028	.1536	-.0094	-.0743	-.0828	-.0533	.0088
30.000			.6217	.1413	-.2131	-.2893	-.3681	-.3152	.3308	.1774	-.0827	-.1282	-.1393	-.0849	-.0128
60.000			.4883	.0145	-.3123	-.3764	-.4053	-.1165	.4340	.0861	-.1229	-.1272	-.0752	-.0148	.0158
90.000		.7845	.3931	-.0829	-.3746	-.4340	-.4463	-.0019	.4977		-.4076	-.2589	-.0110	-.0233	-.0428
120.000			.3459	-.1030	-.3961	-.4495	-.4559	-.0312	.1851	-.0311	-.3507	-.1444	-.0184	-.0364	-.0482
135.000								-.1040		.1599		-.3048		-.0535	
150.000			.3444	-.1126	-.3991	-.4505	-.1617	-.1056	.0653	.2770	.0039	-.3516	-.1113	-.1439	-.0906
165.000				-.1125	-.3936	-.4515	-.1286	-.0811	.0704	.2713	.2084	-.2195	-.0847	-.0453	-.0569
180.000	1.1230	.7772	.3669	-.1052	-.3991	-.4493	-.2383	-.0819	.1106	.2363	.2736	-.2458	-.0857	-.0591	-.0643
270.000		1.0710							.4682						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+912N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(10) = 7.920 BETAO (9) = 6.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0059	.1017	.0410
30.000	-.0089	.0887	.0428
60.000	.0219	.1442	.1248
90.000	.0651	.1755	
120.000	.0978	.1778	.2227
135.000	.0828	.1781	.1383
150.000	.0681	.1450	.0583
165.000	.0905	.1767	.2635
180.000	.0834	.1843	.2683

ALPHAO(10) = 7.910 BETAO (10) = 8.160

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0030	.0080	.0490	.1130	.1790	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0950	1.0680	.7501	.2575	-.1033	-.2038	-.2931	-.0426	.1195	.0950	-.0375	-.0874	-.1097	-.0806	-.0620
30.000			.5717	.0720	-.2447	-.3206	-.3897	-.0171	.0340	.1558	-.0797	-.1418	-.1657	-.1211	-.0553
60.000			.4310	-.0284	-.3478	-.4009	-.3703	-.0824	.2603	.0987	-.1419	-.1474	-.1078	-.0496	-.0135
90.000		.7028	.3447	-.0929	-.4001	-.4571	-.4603	-.0050	.4764		-.1473	-.1546	-.0657	-.0648	-.0791
120.000			.2711	-.1281	-.4141	-.4614	-.4618	-.0799	.2029	-.0566	-.1352	-.1031	-.0460	-.0745	-.0776
135.000								-.1160		.1607		-.2979		-.0928	
150.000			.3161	-.1341	-.4140	-.4389	-.1807	-.1038	.0515	.2427	-.0092	-.1149	-.1349	-.1576	-.1151
165.000				-.1216	-.4059	-.4621	-.1396	-.1144	.0608	.2261	.1790	-.2399	-.1052	-.1107	-.0980
180.000	1.0950	.6063	.2889	-.1063	-.3996	-.4594	-.2991	-.0935	.1011	.1351	.2209	-.3453	-.1221	-.1464	-.1034
270.000		1.1100							.4700						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0106	.0562	.0058
30.000	.0134	.0524	.0169
60.000	.0496	.1281	.1003
90.000	.0461	.1702	
120.000	.0833	.1728	.2321
135.000	.0772	.1758	.1452
150.000	.0633	.1385	.0441
165.000	.0755	.1551	.2583
180.000	.0501	.1467	.2448

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(10) = 8.060 BETAO (11) = 11.180

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0600	1.0520	.7095	.2399	-.1270	-.2086	-.3038	-.2068	-.0977	.0166	-.0690	-.1025	-.1230	-.1098	-.1116
30.000			.5255	.0622	-.2812	-.3523	-.4041	-.3476	.1551	.1373	-.0856	-.1521	-.1771	-.1526	-.0782
60.000			.3800	-.0766	-.3843	-.4086	-.3702	-.1016	.1833	.0285	-.1612	-.1741	-.1485	-.0835	.0024
90.000		.6823	.3024	-.1326	-.4281	-.4660	-.3369	-.0441	.4051		- 4800	-.1414	-.1247	-.1032	-.0698
120.000			.2769	-.1551	-.4323	-.4763	-.2787	-.0908	.1792	-.0747	-.3162	-.1115	-.0876	-.1083	-.0574
135.000								-.1254		.1330		-.2852		-.1215	
150.000			.2867	-.1564	-.4336	-.4783	-.1844	-.1304	.0285	.1961	-.0800	-.4034	-.1661	-.1967	-.1230
165.000				-.1467	-.4248	-.4790	-.1539	-.1348	.0648	.1762	.1470	-.2591	-.1347	-.1496	-.1125
180.000	1.0600	.6357	.3489	-.1230	-.4073	-.4670	-.4539	-.0743	.0306	.1252	.1627	-.3379	-.1513	-.2215	-.1408
270.000		1.1490							.4752						

X/LT	.7460	.8530	.9280
PHI			
.000	.0367	.0057	-.0500
30.000	-.0108	.0215	-.0100
60.000	.0172	.1174	.0775
90.000	.0195	.1573	
120.000	.0763	.1657	.2258
135.000	.0747	.1677	.1386
150.000	.0556	.1352	.0203
165.000	.0515	.1444	.2482
180.000	.0172	.1035	.2225

ALPHAO(11) = 10.040 BETAO (1) = -9.930

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0350	1.0880	.7570	.2855	-.0976	-.1728	-.2647	-.1954	.0127	.0431	-.0418	-.0443	-.0732	-.0799	-.0914
30.000			.9057	.4190	.0151	-.0660	-.1619	.2550	.2396	.0385	-.0283	.0224	.0286	.0228	.0282
60.000			.9057	.4238	.0204	-.0570	-.1741	.3853	.4681	-.0586	-.0518	.0014	.0872	.0953	.0947
90.000		1.1130	.7756	.3050	-.0902	-.1641	-.1256	.3878	.4239		-.3354	-.1705	-.0015	.0760	.1091
120.000			.5706	.1082	-.2462	-.3165	-.3227	-.0124	-.1234	-.2116	-.3535	-.2061	.0473	.1344	.1167
135.000								-.1211		-.2313		-.1790		.1629	
150.000			.4223	-.0375	-.3583	-.4258	-.4558	-.1779	-.2456	.1136	-.0775	-.1918	.0331	.0542	.0591
165.000				-.1166	-.4166	-.4756	-.4614	-.3629	-.0862	.2367	.1940	.0272	-.0365	-.0217	.0596
180.000	1.0350	.7247	.2964	-.1437	-.4395	-.4771	-.4627	-.2868	.0815	.2989	.3236	-.3901	-.0342	-.0634	.0026
270.000		.6546							.3106						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(11) = 10.040 BETAO (1) = -9.930

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0463	.0224	-.0336
30.000	.0854	.1589	.0507
60.000	.1445	.2541	.1378
90.000	.2024	.2770	
120.000	.2183	.2574	.5822
135.000	.2645	.3877	.5254
150.000	.2164	.3558	.5885
165.000	.2098	.3316	.6546
180.000	.1707	.2688	.4363

ALPHAO(11) = 9.930 BETAO (2) = -7.950

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0720	1.1250	.7832	.3001	-.0891	-.1628	-.2524	-.1862	.1652	.1165	-.0050	-.0244	-.0501	-.0576	-.0560
30.000			.8811	.0952	-.0082	-.0880	-.1814	-.0765	.2728	.0952	-.0246	.0392	.0210	.0212	.0301
60.000			.8580	.3743	-.0183	-.0997	-.2115	.3449	.4720	-.0296	-.0450	.0379	.0654	.0765	.0798
90.000		1.0720	.7215	.2480	-.1343	-.2085	-.1945	.3933	.4130		-.3448	-.1352	.0129	.0909	.0934
120.000			.5415	.0720	-.2744	-.3426	-.3843	-.0227	-.1155	-.2185	-.3407	-.2191	.0401	.1327	.1044
135.000								-.1198		-.0492		-.2349		.1380	
150.000			.4176	-.0463	-.3630	-.4278	-.4601	-.2252	-.1125	.1938	-.0239	-.2280	.0091	.0359	.0439
165.000				-.1070	-.4087	-.4663	-.4435	-.2480	.0212	.2688	.2330	-.0272	.0212	.0006	.0474
180.000	1.0720	.7435	.3167	-.1316	-.4199	-.4668	-.4018	-.1213	.0946	.2959	.3234	-.4116	-.0392	-.0496	.0111
270.000		.7115							.4707						

X/LT	.7460	.8530	.9280
PHI			
.000	.0220	.0719	.0026
30.000	.0896	.1758	.0511
60.000	.1219	.2382	.1060
90.000	.1625	.2000	
120.000	.2028	.2584	.6394
135.000	[illegible]	.3734	.5128
150.000	[illegible]	.3501	.5785
165.000	[illegible]	.3350	.6071
180.000	.1745	.2751	.3960

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(11) = 9.960 BETAO (3) = -5.920

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0890	1.1580	.8031	.3172	-.0746	-.1508	-.2432	-.1843	.2318	.1699	.0239	-.0116	-.0275	-.0267	-.0088
30.000			.8616	.3715	-.0272	-.1086	-.2025	-.1098	.3091	.1402	-.0343	.0354	.0207	.0250	.0452
60.000			.8076	.3225	-.0679	-.1426	-.2547	.2813	.4752	-.0020	-.0434	.0415	.0531	.0662	.0642
90.000		1.0200	.6629	.1901	-.1794	-.2552	-.2577	.3631	.3984		-.3354	-.1020	.0180	.0722	.0543
120.000			.4981	.0326	-.3016	-.3719	-.4316	-.0402	-.1048	-.1592	-.3522	-.2412	.0329	.1217	.0808
135.000								-.1949		-.0228		-.2770		.1051	
150.000			.3916	-.0650	-.3796	-.4377	-.4293	-.2772	-.0170	.2087	-.0005	-.2716	.0094	.0121	.0154
165.000				-.1099	-.4084	-.4638	-.4349	-.2268	.0763	.2763	.2333	-.0737	.0243	.0124	.0328
180.000	1.0890	.7347	.3170	-.1322	-.4114	-.4636	-.1602	-.1144	.0451	.2776	.3030	-.3689	-.0351	-.0297	.0005
270.000		.7558							.3999						

X/LT	.7460	.8530	.9280
PHI			
.000	.0351	.1029	.0380
30.000	.0697	.1647	.0542
60.000	.0884	.2057	.0722
90.000	.1197	.1469	
120.000	.1740	.2617	.0360
135.000	.2015	.3508	.4767
150.000	.1804	.3384	.5261
165.000	.1963	.3301	.5327
180.000	.1725	.2893	.3635

ALPHAO(11) = 9.960 BETAO (4) = -3.970

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1100	1.1800	.8180	.3253	-.0632	-.1439	-.2400	-.1860	.2699	.2155	.0433	-.0067	-.0128	-.0067	.0363
30.000			.8391	.3450	-.0503	-.1300	-.2241	-.1455	.3314	.1744	-.0260	.0151	.0148	.0353	.0588
60.000			.7607	.2725	-.1091	-.1832	-.2892	.1460	.4820	.0226	-.0466	.0227	.0479	.0770	.0666
90.000		.9855	.6166	.1443	-.2172	-.2919	-.3486	.2918	.3978		-.3271	-.0868	.0313	.0722	.0361
120.000			.4709	-.0001	-.3245	-.3915	-.4544	-.0595	-.0069	-.1651	-.3567	-.2022	.0424	.0916	.0560
135.000								-.1571		-.0005		-.2836		.0651	
150.000			.3847	-.0783	-.3858	-.4392	-.4190	-.1498	.0476	.2177	-.0001	-.2514	-.0054	-.0148	-.0117
165.000				-.1077	-.4087	-.4554	-.3249	-.0653	.0657	.2515	.2031	-.1274	-.0105	.0090	.0194
180.000	1.1100	.7418	.3256	-.1335	-.4089	-.4556	-.0863	-.0893	.0153	.2568	.3816	-.1828	-.0541	-.0115	-.0016
270.000		.8032							.4204						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(11) = 9.960 BETAO (4) = -3.970

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0441	.0992	.0726
30.000	.0671	.1501	.0683
60.000	.0727	.1653	.0693
90.000	.0929	.1308	
120.000	.1530	.2681	.5352
135.000	.1646	.3210	.4053
150.000	.1455	.3116	.4410
165.000	.1708	.3169	.4952
180.000	.1531	.2797	.3683

ALPHAO(11) = 9.950 BETAO (5) = -1.970

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.1230	1.1900	.8214	.3304	-.0631	-.1407	-.2346	-.1862	.2976	.2358	.0578	.0040	-.0005	.0087	.0552
30.000			.8081	.3161	-.0741	-.1551	-.2453	-.1953	.3340	.2031	-.0123	-.0084	.0052	.0323	.0602
60.000			.7980	.3021	-.1515	-.2264	-.3260	-.1361	.4880	.0440	-.0505	-.0165	.0102	.0620	.0642
90.000		.9433	.5574	.1704	-.2557	-.3675	-.4094	.1613	.4111		-.3140	-.1981	-.0077	.0501	.0345
120.000			.4397	-.0261	-.3493	-.4089	-.4698	-.0845	.0339	-.1297	-.3305	-.2126	.0374	.0723	.0324
135.000								-.1123		.0576		-.2998		.0574	
150.000			.3758	-.0794	-.3899	-.4422	-.4132	-.1156	.0707	.2446	.0115	-.2433	-.0113	-.0124	-.0143
165.000				-.1116	-.4030	-.4551	-.0958	-.0956	.0219	.2609	.2229	-.1335	-.0113	.0156	.0291
180.000	1.1230	.7449	.3322	-.1257	-.4057	-.4537	-.0879	-.0997	.0153	.2740	.3021	-.1630	-.0334	.0126	.0239
270.000		.8550							.4181						

X/LT	.7460	.8530	.9280
PHI			
.000	.0594	.0997	.1049
30.000	.0644	.1247	.1069
60.000	.0679	.1703	.1469
90.000	.0921	.1396	
120.000	.1228	.2358	.3912
135.000	.1304	.2608	.2888
150.000	.1126	.2479	.2906
165.000	.1399	.2554	.4160
180.000	.1298	.2256	.3341

ARC11-716 IA14 OL+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAO(11) = 9.950 BETAO (6) = .030

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1290	1.1930	.8211	.3298	-.0617	-.1421	-.2356	-.1822	.3258	.2409	.0606	.0081	.0026	.0087	.0532
30.000			.7722	.2801	-.0999	-.1828	-.2699	-.2218	.3394	.2165	-.0116	-.0147	-.0230	.0082	.0442
60.000			.6526	.1672	-.1937	-.2672	-.3632	-.1955	.4936	.0586	-.0454	-.0330	-.0088	.0364	.0350
90.000		.8923	.5134	.0435	-.2938	-.3639	-.4427	.0675	.4162		-.3153	-.3322	-.0304	.0207	.0180
120.000			.4055	-.0567	-.3677	-.4287	-.4662	-.0843	.0472	-.0897	-.3219	-.2267	.0241	.0545	.0203
135.000								-.0815		.0894		-.2952		.0416	
150.000			.3906	-.0956	-.3953	-.4485	-.4193	-.0699	.0605	.2603	.0114	-.2560	-.0368	-.0311	-.0295
165.000				-.1175	-.4052	-.4527	-.1044	-.1029	.0076	.2685	.2482	-.1482	-.0236	.0122	.0268
180.000	1.1290	.7429	.3520	-.1222	-.4034	-.4577	-.1176	-.1153	.0179	.2890	.3102	-.1668	-.0381	.0187	.0377
270.000		.9066							.4094						

Y/LT	.7480	.8530	.9280
PHI			
.000	.0614	.0713	.1134
30.000	.0525	.0948	.1136
60.000	.0571	.1598	.1763
90.000	.0803	.1999	
120.000	.1153	.1982	.2668
135.000	.1166	.2222	.1958
150.000	.0994	.2052	.1869
165.000	.1340	.2241	.2891
180.000	.1370	.2236	.2607

ALPHAO(11) = 9.950 BETAO (7) = 2.060

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1250	1.1880	.8193	.3266	-.0644	-.1420	-.2367	-.1841	.3306	.2307	.0549	-.0056	-.0046	.0063	.0559
30.000			.7339	.2470	-.1303	-.2064	-.2944	-.2474	.3746	.2136	-.0234	-.0414	-.0457	-.0241	.0325
60.000			.5516	.1172	-.2330	-.3028	-.3960	-.2638	.4996	.0901	-.0577	-.0544	-.0185	.0244	.0531
90.000		.8468	.4636	.0003	-.3291	-.3926	-.4691	.0149	.4231		-.3404	-.4138	-.0079	.0116	.0063
120.000			.3767	-.0771	-.3866	-.4439	-.5077	-.0645	.0697	-.0836	-.3511	-.2244	.0237	.0365	.0096
135.000								-.0416		.1014		-.3050		.0260	
150.000			.3457	-.1119	-.4003	-.4523	-.1828	-.1074	.0531	.2611	.0161	-.2603	-.0531	-.0392	-.0367
165.000				-.1214	-.4032	-.4558	-.1049	-.1006	.0196	.2815	.2397	-.1630	-.0318	.0048	.0229
180.000	1.1250	.7421	.3354	-.1279	-.4062	-.4540	-.1256	-.1069	.0234	.2684	.2956	-.1622	-.0468	.0149	.0275
270.000		.9553							.4098						

Y/LT	.7480	.8530	.9280
PHI			

ARC(1-716 IA14 01+T12+S12M25+AT10 EXTERNAL TANK (RS1T32)

ALPHAO(11) = 9.950 BETAO (7) = 2.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	.0612	.0767	.1095
30.000	.0436	.1007	.1050
60.000	.0559	.1651	.1640
90.000	.0761	.1928	
120.000	.1166	.1870	.2408
135.000	.1194	.2022	.1529
150.000	.1080	.1741	.1350
165.000	.1235	.2191	.2993
180.000	.1323	.2317	.2213

ALPHAO(11) = 9.960 BETAO (8) = 4.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0300	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1130	1.1710	.8074	.3163	-.0727	-.1522	-.2422	-.1918	.2845	.2049	.0407	-.0089	-.0157	-.0002	.0319
30.000			.6905	.2093	-.1579	-.2359	-.3191	-.2713	.3561	.2024	-.0348	-.0619	-.0728	-.0504	.0041
60.000			.5339	.1694	-.2741	-.3375	-.4048	-.2153	.4913	.1053	-.0618	-.0783	-.0307	.0026	.0321
90.000		.7998	.4157	-.0339	-.3652	-.4181	-.4919	-.0013	.4204		-.3753	-.4093	-.0200	-.0073	-.0200
120.000			.3449	-.1013	-.4056	-.4566	-.4580	-.0712	.0982	-.0836	-.3852	-.1941	.0130	.0119	-.0116
135.000								-.1013		.1277		-.3100		.0010	
150.000			.3266	-.1261	-.4110	-.4604	-.1867	-.1185	.0801	.2746	-.0055	-.2921	-.0718	-.0592	-.0672
165.000				-.1332	-.4113	-.4616	-.1174	-.0998	.0523	.2865	.2255	-.2077	-.0448	-.0124	.0046
180.000	1.1130	.7398	.3339	-.1325	-.4135	-.4626	-.1407	-.1066	.0470	.2558	.2923	-.1587	-.0483	-.0134	-.0050
270.000		1.0000							.4124						

X/LT	.7480	.8530	.9280
PHI			
.000	.0377	.1008	.0740
30.000	.0135	.1138	.0758
60.000	.0453	.1649	.1453
90.000	.0774	.1933	
120.000	.1198	.1859	.2278
135.000	.1201	.1923	.1329
150.000	.1034	.1593	.0856
165.000	.1229	.2063	.2271
180.000	.1272	.2197	.2289

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAD(11) = 10.040 BETAD (9) = 6.140

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0875	1.1560	.8011	.3150	-.0714	-.1524	-.2441	-.1911	.2155	.1687	.0222	-.0066	-.0247	-.0272	-.0228
30.000			.6521	.1746	-.1855	-.2630	-.3463	-.2964	.3026	.1864	-.0423	-.0763	-.0918	-.0806	-.0332
60.000			.4836	.0201	-.3103	-.3754	-.3655	-.0916	.4180	.1296	-.0673	-.0834	-.0374	-.0308	.0106
90.000		.7444	.3662	-.0818	-.3903	-.4462	-.4847	-.0266	.4256		-.4208	-.2413	-.0465	-.0447	-.0487
120.000			.3090	-.1253	-.4157	-.4681	-.4596	-.0775	.3020	-.0818	-.4127	-.1297	-.0071	-.0155	-.0312
135.000								-.1190		.1390		-.2677		-.0289	
150.000			.3010	-.1422	-.4181	-.4681	-.1706	-.1283	.0658	.2726	-.0103	-.3122	-.0898	-.0990	-.0718
165.000				-.1447	-.4152	-.4689	-.1617	-.1119	.0517	.2633	.1962	-.2273	-.0659	-.0312	-.0343
180.000	1.0870	.7136	.3175	-.1367	-.4164	-.4696	-.2050	-.1116	.0905	.2277	.2580	-.2128	-.0651	-.0307	-.0437
270.000		1.0390							.4121						

X/LT	.7460	.8530	.9280
PHI			
.000	.0197	.1159	.0428
30.000	-.0065	.0989	.0493
60.000	.0393	.1574	.1323
90.000	.0638	.1829	
120.000	.1024	.1779	.2224
135.000	.0999	.1829	.1338
150.000	.0832	.1440	.0541
165.000	.1004	.1776	.2538
180.000	.0959	.1842	.2528

ALPHAD(11) = 10.030 BETAD (10) = 8.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0620	1.1250	.7813	.3025	-.0849	-.1655	-.2553	-.2037	.1115	.1056	-.0071	-.0292	-.0583	-.0801	-.0614
30.000			.6006	.1313	-.2245	-.3009	-.3800	-.3144	.2157	.1601	-.0487	-.1020	-.1283	-.1245	-.0922
60.000			.4286	-.0292	-.3597	-.4152	-.3702	-.0919	.3275	.1152	-.0917	-.0959	-.0703	-.0664	-.0151
90.000		.6978	.3194	-.1174	-.4204	-.4753	-.2921	-.0602	.4120		-.4616	-.2208	-.0889	-.0902	-.0782
120.000			.2764	-.1531	-.4362	-.4798	-.4156	-.0926	.1307	-.0615	-.3987	-.1097	-.0409	-.0551	-.0494
135.000								-.1276		.1366		-.2719		-.0688	
150.000			.2786	-.1618	-.4334	-.4808	-.1902	-.1281	.0696	.2399	-.0489	-.3679	-.1206	-.1303	-.0827
165.000				-.1605	-.4299	-.4858	-.1626	-.1314	.0648	.2263	.1597	-.2476	-.0915	-.0759	-.0728
180.000	1.0620	.6256	.3141	-.1493	-.4299	-.4805	-.2554	-.1058	.0721	.1781	.2059	-.2601	-.0925	-.1062	-.0690
270.000		1.0830							.4213						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 OI+T12+S12N25+AT10 EXTERNAL TANK (RB1T32)

ALPHAD(11) = 10.030 BETAD (10) = 8.160

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0220	.0666	.0001
30.000	.0131	.0463	.0198
60.000	.0403	.1326	.1109
90.000	.0483	.1645	
120.000	.1029	.1762	.2203
135.000	.0976	.1752	.1360
150.000	.0719	.1351	.0381
165.000	.0864	.1609	.2574
180.000	.0666	.1477	.2409

ALPHAD(11) = 10.070 BETAD (11) = 10.230

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0320	.0760	.0490	.1130	.1780	.1940	.2170	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0320	1.0910	.7530	.2902	-.0936	-.1671	-.2633	-.1118	.0097	.0334	-.0309	-.0513	-.0710	-.0817	-.0696
30.000			.5467	.0329	-.2523	-.3254	-.4043	-.3427	-.1226	.1421	-.0498	-.1136	-.1453	.1433	-.1395
60.000			.3758	-.0757	-.3639	-.4128	-.3930	-.1038	.2224	.0747	-.1099	-.1086	-.0898	-.0792	-.0296
90.000		.1881	.2803	-.1457	-.4426	-.4039	-.2755	-.1045	.3856		-.4713	-.1998	-.1131	-.1159	-.0821
120.000			.2538	-.1726	-.4551	-.4751	-.2959	-.0914	.1153	-.0546	-.3759	-.1182	-.0652	-.0803	-.0458
135.000								-.1213		.1189		-.2759		-.0889	
150.000			.2611	-.1807	-.4456	-.4655	-.1890	-.1256	.0539	.1933	-.0642	-.3753	-.1430	-.1580	-.0849
165.000				-.1760	-.4424	-.4939	-.1774	-.1467	.1427	.1747	.1515	-.2521	-.1152	-.1106	-.0803
180.000	1.0320	.5709	.3087	-.1550	-.4347	-.4870	-.4972	-.0697	-.0071	.0976	.1210	-.2648	-.1238	-.1797	-.0972
270.000		1.1240							.4382						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0165	.0329	-.0305
30.000	.0039	.0151	.0004
60.000	.0390	.1103	.0965
90.000	.0295	.1540	
120.000	.0854	.1601	.2123
135.000	.0719	.1575	.1245
150.000	.0576	.1117	.0002
165.000	.0528	.1350	.2502
180.000	.0269	.1031	.2132

ARC11-716 IA14 O1+T12+S12N25%AT10 EXTERNAL TANK (RB1T33) (17 APR 74)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5830 INCHES
LREF = 38.7090 INCHES YMRP = .0000 INCHES
BREF = 38.7090 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 1.250 ELEVON = .000
RUDDER = .000 SPDBRK = .000

ALPHAO(1) = -10.340 BETAO (1) = -9.910

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1040	.7061	.3432	-.0811	- 3392	-.3860	-.4078	-.3877	-.0334	.0296	-.1267	-.2428	-.2095	-.0826	-.0421
30.000			.4374	.0058	.2807	-.3461	-.4016	-.3643	-.2060	-.3830	-.4448	-.3133	-.1987	-.1421	-.1005
60.000			.6147	.1631	-.1551	-.2185	-.2954	-.1257	-.0433	-.4799	-.5328	-.4858	-.2834	-.0878	-.0465
90.000		1.1740	.8197	.3469	-.0057	-.0794	-.1564	.4011	.5214		-.2859	-.2218	-.2821	-.1926	-.0700
120.000			.9521	.4761	.0987	.0203	-.0737	.0032	.5683	.1741	.4439	.3501	.2256	.1027	-.0098
135.000								.0141		.3811		.3117		.1284	
150.000			.9734	.4865	.1123	.0336	-.0714	-.0095	.3995	.5684	.5048	.2734	.0292	-.0335	-.0280
165.000				.4448	.0671	-.0088	-.10.	-.0620	.3218	.5955	.5216	.2634	.0027	-.0893	-.0708
180.000	1.1040	1.2460	.8439	.5765	.0149	-.0541	-.1381	-.1205	.2627	.5630	.3811	-.1521	-.0669	-.2187	-.1618
270.000		.7079							.5225						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0624	-.0380	-.0071
30.000	-.0992	-.0626	.0493
60.000	-.1073	-.1426	-.0040
90.000	-.1892	-.4370	
120.000	-.0035	.1177	.7192
135.000	.0286	.1723	.4569
150.000	-.0051	.1832	.4495
165.000	-.0531	.1635	.6362
180.000	-.0934	.1385	.4638

ALPHAO(1) = -10.260 BETAO (2) = -7.920

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1310	.7360	.3614	-.0570	-.3198	-.3656	-.3966	-.3751	-.0191	.0499	-.0952	-.2346	-.2236	-.0792	-.0434
30.000			.4359	.0071	-.2786	-.3328	-.3956	-.3631	-.1701	-.3985	-.3594	-.3035	-.1786	-.1373	-.0983
60.000			.5842	.1379	-.1787	-.2367	-.3151	-.2166	-.0487	-.4848	-.5201	-.4676	-.2608	-.1318	-.0494
90.000		1.1300	.7672	.3064	-.0462	-.1138	-.1937	.1949	.5136		-.2839	-.2375	-.2985	-.2223	-.0759
120.000			.9040	.4370	.0608	-.0151	-.1089	-.0617	.5703	.2012	.4189	.3037	.1858	.0725	-.0585
135.000								-.0503		.4132		.2803		.1002	
150.000			.9488	.718	.0905	.0150	-.0936	-.0370	.4005	.5766	.4189	.2487	.0350	-.0457	-.0736

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(1) = -10.260 BETAO (2) = -7.920

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
165.000				.4372	.0644	-.0105	-.1076	-.0676	.3059	.5952	.6143	.1848	.0394	-.0858	-.1056
180.000	1.1310	1.2530	.8581	.3853	.0258	-.0464	-.1020	-.1162	.2930	.5752	.5944	-.2030	-.0941	-.1718	-.1127
270.000		.7590							.5654						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0348	-.0174	-.0369
30.000	-.0726	-.0375	.0408
60.000	-.0710	-.0795	.0526
90.000	-.0965	-.3921	
120.000	-.0345	.0943	.6692
135.000	.0008	.1701	.4130
150.000	-.0239	.1716	.3777
165.000	-.0557	.1472	.6209
180.000	-.0649	.1312	.4525

ALPHAO(1) = -10.250 BETAO (3) = -5.920

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1610	.7602	.3729	-.0520	-.2113	-.3586	-.4008	-.3688	-.0004	.0583	-.0634	-.2279	-.2172	-.0509	-.0385
30.000			.4309	-.0015	-.2838	-.3387	-.3990	-.3546	-.1401	-.1908	-.3081	-.2897	-.1598	-.1244	-.0733
60.000			.3537	.1020	-.2075	-.2634	-.3373	-.2550	-.0485	-.4907	-.5078	-.4673	-.2647	-.1236	-.0543
90.000		1.0940	.7195	.2539	-.0864	-.1551	-.2377	.2116	.5042		-.2681	-.2523	-.3213	-.2482	-.0805
120.000			.8514	.3981	.0211	-.0544	-.1412	-.1101	.5424	.2395	.3920	.2527	.1438	.0421	-.1011
135.000								-.0785		.4433		.2462		.0607	
150.000			.9253	.4391	.0636	-.0113	-.1148	-.0597	.4033	.5773	.3573	.1807	.0136	-.0613	-.1148
165.000				.4275	.0557	-.0175	-.1148	-.0770	.3781	.6069	.5989	.1203	.0421	-.0821	-.147
180.000	1.1610	1.2710	.8735	.3914	.0275	-.0457	-.1303	-.1130	.3240	.6033	.6004	-.2389	-.0203	-.1828	-.
270.000		.8112							.4390						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0455	.0014	-.0388
30.000	-.0699	-.0279	.0146
60.000	-.0632	-.0427	.0739
90.000	-.0660	-.2544	
120.000	-.0587	.0534	.5680
135.000	-.0260	.1535	.3678
150.000	-.0446	.1569	.3422

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(1) = -10.240 BETAO (3) = -5.920

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
165.000	-.0565	.1385	.5455
180.000	-.0544	.1256	.3957

ALPHAO(1) = -10.240 BETAO (4) = -3.960

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1780	.7798	.3865	-.0415	-.3045	-.3530	-.4047	-.3549	-.0074	.0777	-.0359	-.2271	-.2193	-.0444	-.0208
30.000			.4271	-.0044	-.2849	-.3388	-.3971	-.3503	-.1081	-.1161	-.2609	-.2775	-.1538	-.1026	-.0639
60.000			.5255	.0773	-.2236	-.2816	-.3601	-.2814	-.0561	-.4817	-.5052	-.4483	-.2459	-.1237	-.0572
90.000		1.0520	.6727	.2052	-.1226	-.1851	-.2695	.1269	.5009		-.2695	-.2851	-.3274	-.2488	-.0915
120.000			.8137	.3449	-.0147	-.0882	-.1749	-.1470	.5019	.2718	.3660	.2042	.1102	.0148	-.1260
135.000								-.1094		.4607		.1861		.0217	
150.000			.8964	.4125	.0406	-.0312	-.1371	-.0851	.4012	.5708	.3179	.0642	-.0051	-.0985	-.1569
165.000				.4209	.0513	-.0287	-.1221	-.0864	.3606	.6130	.5837	.0810	.0342	-.1060	-.1488
180.000	1.1780	1.2720	.8838	.3996	.0326	-.0424	-.1294	-.1022	.3148	.5976	.6218	-.1762	-.0053	-.0938	-.1888
270.000		.8594							.4488						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0395	-.0107	-.0480
30.000	-.0562	-.0183	-.0012
60.000	-.0562	-.0115	.0776
90.000	-.0580	-.1423	
120.000	-.0019	.0263	.5175
135.000	-.0562	.1136	.3248
150.000	-.0738	.1268	.2926
165.000	-.0631	.1398	.4763
180.000	-.0425	.1136	.3880

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(1) = -10.250 BETAO (5) = -1.970

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1940	.7928	.3954	-.0396	-.2989	-.3471	-.3983	-.3544	.0006	.0939	-.0159	-.2228	-.2278	-.0431	-.0110
30.000			.4184	-.0165	-.2902	-.3412	-.3955	-.3497	-.0621	-.0812	-.2251	-.2660	-.1632	-.1009	-.0503
60.000			.4942	.0508	-.2431	-.3012	-.3759	-.2067	-.0471	-.4424	-.5030	-.4140	-.2089	-.1114	-.0568
90.000		1.0110	.6240	.1612	-.1577	-.2201	-.3019	.0788	.5012		-.2630	-.3083	-.3371	-.2527	-.1094
120.000			.7636	.2925	-.0558	-.1271	-.2108	-.1787	.4640	.3128	.3350	.1575	.0749	-.0053	-.1571
135.000								-.1395		.4730		.1345		-.0206	
150.000			.8603	.3778	.0117	-.0603	-.1618	-.1161	.4252	.5829	.2924	-.0123	-.0141	-.1441	-.2001
165.000				.4042	.0366	-.0407	-.1338	-.0953	.3919	.6400	.5640	.0014	.0185	-.1159	-.1297
180.000	1.1940	1.2790	.8895	.4040	.0322	-.0405	-.1330	-.0712	.2660	.6162	.6304	-.1155	.0322	-.0680	-.1620
270.000		.9135							.4849						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0321	-.0068	-.0415
30.000	-.0500	-.0076	.0020
60.000	-.0534	.0007	.0830
90.000	-.0565	-.0681	
120.000	-.0860	-.0454	.4188
135.000	-.0750	.0581	.2469
150.000	-.0924	.0859	.2339
165.000	-.0679	.1046	.4733
180.000	-.0752	.0817	.4255

ALPHAO(1) = -10.160 BETAO (6) = .020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1980	.7983	.3952	-.0365	-.2970	-.3458	-.3915	-.3602	.0074	.0917	-.0190	-.2287	-.2004	-.0402	-.0038
30.000			.4092	-.0232	-.2927	-.3432	-.3950	-.3472	-.0009	-.0535	-.2060	-.2075	-.1388	-.0832	-.0498
60.000			.4669	.0260	-.2621	-.3167	-.3883	-.1390	-.0289	-.4301	-.5370	-.2913	-.2271	-.0531	-.0289
90.000		.9632	.5758	.1158	-.1924	-.2524	-.3298	.0447	.5004		-.2614	-.3182	-.2177	-.1004	-.0897
120.000			.7155	.2459	-.0951	-.1633	-.2452	-.1657	.5936	.3189	.2961	.1286	.0449	-.0123	-.1796
135.000								-.1691		.4796		.0968		-.0620	
150.000			.8234	.3435	-.0170	-.0880	-.1857	-.1460	.4891	.6030	.2581	-.0711	-.0266	-.1874	-.2263
165.000				.3910	.0236	-.0568	-.1465	-.1073	.3375	.6413	.5430	-.0350	.0048	-.1100	-.1603
180.000	1.1980	1.2770	.8907	.3987	.0297	-.0494	-.1367	-.0712	.2539	.6009	.6219	-.1057	.0551	-.0918	-.1371
270.000		.9600							.4909						

X/LT	.7460	.8530	.9280
PHI			

ARC:1-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(1) = -10.160 BETAO (6) = .020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0269	-.0071	-.0316
30.000	-.0600	-.0164	.0277
60.000	-.0428	.0059	.1327
90.000	-.0480	.0119	
120.000	-.0472	-.0308	.2899
135.000	-.0553	.0576	.1561
150.000	-.0747	.0506	.1954
165.000	-.0543	.0836	.3141
180.000	-.0494	.0969	.2668

ALPHAO(1) = -10.160 BETAO (7) = 2.040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1920	.7949	.3940	-.0346	-.2994	-.3451	-.4019	-.3594	.0076	.0807	-.0330	-.2402	-.2083	-.0422	-.0075
30.000			.3988	-.0320	-.2981	-.3467	-.3973	-.3496	.0205	-.0006	-.1734	-.2208	-.1602	-.0600	-.0438
60.000			.4372	-.0013	-.2768	-.3304	-.3985	-.1451	.0001	-.3796	-.5251	-.2480	-.2176	-.0929	-.0331
90.000		.9186	.5291	.0776	-.2240	-.2823	-.3535	-.0080	.4884		-.2753	-.3302	-.1641	-.1048	-.0937
120.000			.6598	.1954	-.1352	-.1995	-.2774	-.1958	.5359	.3448	.2569	.1046	.0241	-.0412	-.1954
135.000								-.1896		.4713		.0610		-.1009	
150.000			.7817	.3016	-.0492	-.1173	-.2127	-.1735	.4639	.5835	.1821	-.0963	-.0665	-.2153	-.2438
165.000				.3678	.0064	-.0705	-.1609	-.1200	.3227	.5980	.5116	.0152	.0171	-.0828	-.1640
180.000	1.1920	1.2690	.8832	.3959	.0256	-.0491	-.1415	-.0654	.2597	.5597	.5970	-.0475	.0259	-.1072	-.1810
270.000		1.0070							.4865						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0345	-.0062	-.0250
30.000	-.0515	-.0108	.0030
60.000	-.0351	.0091	.1402
90.000	-.0372	.0303	
120.000	-.0367	.0039	.2143
135.000	-.0606	.0402	.0957
150.000	-.0733	.0332	.0615
165.000	-.0543	.0708	.2676
180.000	-.0686	.0939	.2272

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(1) = -10.220 BETAO (8) = 4.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1800	.7791	.3830	-.0426	-.3041	-.3525	-.3968	-.3672	-.0009	.0515	-.0596	-.2431	-.2105	-.0464	-.0243
30.000			.3765	-.0499	-.3061	-.3520	-.4022	-.3473	-.0177	.0492	-.1499	-.2366	-.1730	-.0496	-.0536
60.000			.3992	-.0333	-.2987	-.3441	-.4105	-.1325	-.0278	-.3305	-.5164	-.2207	-.1848	-.1229	-.0490
90.000		.8637	.4725	.0338	-.2477	-.3110	-.3802	-.0447	.4833		-.2796	-.3408	-.1542	-.1116	-.0978
120.000			.5998	.1409	-.1732	-.2359	-.3136	-.1192	.4027	.3686	.2393	.0881	.0024	-.0705	-.2066
135.000								-.2277		.4433		.0235		-.1259	
150.000			.7350	.2602	-.0800	-.1476	-.2406	-.2057	.3578	.4794	.1935	-.1329	-.0788	-.2532	-.2816
165.000				.3462	-.0127	-.0855	-.1768	-.1371	.2957	.5059	.4894	.0427	.0414	-.0931	-.1757
180.000	1.1800	1.2680	.8776	.3915	.0224	-.0491	-.1426	-.0506	.2460	.5033	.5873	-.1350	.0164	-.1534	-.1816
270.000		1.0550							.4881						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0489	-.0186	-.0216
30.000	-.0582	-.0157	-.0185
60.000	-.0429	.0022	.1357
90.000	-.0471	.0177	
120.000	.0575	-.0010	.1341
135.000	-.0814	.0068	.0390
150.000	-.0934	-.0142	-.0211
165.000	-.0645	.0406	.1654
180.000	-.0845	.0582	.1545

ALPHAO(1) = -10.230 BETAO (9) = 6.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1610	.7589	.3716	-.0523	-.3132	-.3593	-.4100	-.3754	-.0124	.0600	-.0650	-.2343	-.2375	-.0530	-.0356
30.000			.3603	-.0645	-.3178	-.3598	-.4044	-.2904	-.0276	.0556	-.1431	-.2354	-.1848	-.0567	-.0570
60.000			.3678	-.0575	-.3102	-.3535	-.4163	-.1387	-.1317	-.2963	-.5006	-.1949	-.1569	-.1438	-.0658
90.000		.8154	.4300	-.0023	-.2801	-.3329	-.2940	-.0817	.3943		-.2963	-.3583	-.1324	-.1235	-.1087
120.000			.5484	.0995	-.2091	-.2654	-.3399	.0599	.1661	.3611	.2368	.0724	-.0134	-.0983	-.2320
135.000								-.0333		.4249		-.0066		-.1532	
150.000			.6876	.2189	-.1117	-.1764	-.2679	-.2304	.2408	.4118	.1784	-.2038	-.0992	-.3019	-.3056
165.000				.3213	-.0312	-.1051	-.1930	-.1491	.2736	.4710	.4478	.0443	.0380	-.1183	-.1993
180.000	1.1610	1.2220	.8650	.3814	.0165	-.0586	-.1472	-.0323	.2563	.4630	.5738	-.2027	-.0520	-.1360	-.2281
270.000		1.0930							.4911						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(1) = -10.230 BETAO (9) = 6.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0524	-.0342	-.0475
30.000	-.0724	.0009	-.0387
60.000	-.0552	.0248	.1369
90.000	-.0779	-.0131	
120.000	-.0906	-.0123	.1216
135.000	-.1098	-.0112	.0294
150.000	-.1178	-.0357	-.0564
165.000	-.1012	.0071	.1670
180.000	-.1134	.0055	.1750

ALPHAO(1) = -10.230 BETAO (10) = 8.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0190	.0490	.1130	.1790	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1300	.7314	.3568	-.0806	-.3193	-.3681	-.4187	-.3869	-.0340	.0405	-.1014	-.2377	-.2003	-.0725	-.0328
30.000			.3394	-.0800	-.3257	-.3699	-.4116	-.1969	-.0392	.0678	-.1511	-.2344	-.1725	-.0496	-.0409
60.000			.3401	-.0761	-.3270	-.3693	-.2044	-.1291	-.1651	-.2071	-.4702	-.1835	-.1334	-.1156	-.0437
90.000		.7591	.3240	-.0355	- 3082	-.3592	-.0964	-.1275	.2851		-.2897	-.3706	-.1454	-.1284	-.0941
120.000			.4959	.0092	-.2393	-.2982	-.3602	.0220	.1100	.2784	.2566	.0424	-.0258	-.1284	-.2394
135.000								.0158		.4094		-.0358		-.1903	
150.000			.6429	.1895	-.1387	-.2027	-.2924	-.2554	.1913	.3614	.1771	-.2594	-.1373	-.3449	-.3067
165.000				.3021	-.0459	-.1184	-.2096	-.1583	.2176	.4011	.4509	.0184	-.0352	-.1472	-.2392
180.000	1.1300	1.1840	.8559	.3787	.0150	-.0617	-.1500	-.0162	.2511	.4148	.5645	-.1642	-.0381	-.1628	-.2547
270.000		1.1320							.4980						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0429	-.0305	-.0446
30.000	-.0619	-.0224	-.0519
60.000	-.0471	-.0025	.1257
90.000	-.1048	-.0607	
120.000	-.1030	-.0329	.1249
135.000	-.1251	-.0113	.0290
150.000	-.1355	-.0407	-.0738
165.000	-.1220	-.0107	.1397
180.000	-.1449	-.0203	.1296

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(1) = -10.240 BETAO (11) = 10.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1030	.6996	.3369	-.0800	-.3353	-.3847	-.4333	-.4020	-.0485	-.0180	-.1537	-.2412	-.1659	-.0722	-.0391
30.000			.3122	-.1065	-.3419	-.3827	-.4259	-.1357	-.0467	.0315	-.1730	-.2454	-.1322	-.0589	-.0749
60.000			.3099	-.1049	-.3432	-.3811	-.1344	-.1334	-.1616	-.1094	-.4265	-.1591	-.1069	-.0879	-.0721
90.000		.7107	.3400	-.0764	-.3368	-.3847	-.0946	-.1559	.2148		-.2790	-.3747	-.1591	-.1124	-.1152
120.000			.4436	.0106	-.2783	-.3356	-.1549	-.0278	.0958	.3225	.2521	.0075	-.0277	-.1457	-.2697
135.000								-.0113		.3740		-.0750		-.2114	
150.000			.5957	.1421	-.1735	-.2361	-.3241	-.2439	.1467	.3142	.1191	-.3012	-.1510	-.3505	-.3479
165.000				.2750	-.0696	-.1414	-.2297	-.1704	.1591	.3256	.4717	-.0079	-.0803	-.1688	-.2611
180.000	1.1030	1.1350	.8416	.3650	.0061	-.0686	-.1595	-.0103	.2114	.3730	.5434	-.1148	-.0443	-.2429	-.3087
270.000		1.1710							.5096						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0635	-.0454	-.0105
30.000	-.0830	-.0287	-.0480
60.000	-.0721	-.0084	.1474
90.000	-.1316	-.0917	
120.000	-.1228	-.0555	.1000
135.000	-.1480	-.0375	-.0038
150.000	-.1628	-.0659	-.1060
165.000	-.1563	-.0519	.0889
180.000	-.2014	-.0667	.0946

ALPHAO(2) = -8.220 BETAO (1) = -9.940

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1320	.7594	.3895	-.0390	-.3138	-.3636	-.4137	-.3651	-.0330	-.0015	-.1621	-.2272	-.1788	-.0822	-.0364
30.000			.4978	.0550	-.2446	-.3026	-.3697	-.3346	-.1486	-.3124	-.4646	-.2722	-.1780	-.1267	-.0855
60.000			.6666	.2042	-.1230	-.1881	-.2717	-.1413	.0364	-.3912	-.5272	-.4590	-.2295	-.0557	-.0084
90.000		1.2060	.8396	.3662	.0063	-.0684	-.1497	.2813	.5511		-.4220	-.2201	-.2805	-.1604	-.0216
120.000			.9347	.4586	.0799	.0032	-.0909	-.0193	.5209	.0982	.3963	.3427	.2207	.0982	-.0089
135.000								-.0175		.2899		.2997		.1197	
150.000			.9301	.4511	.0751	-.0009	-.1041	-.0470	.3263	.5045	.4559	.2560	.0214	-.0362	-.0310
165.000				.3845	.0237	-.0516	-.1434	-.1044	.2558	.5368	.5915	.2583	-.0108	-.0931	-.0746
180.000	1.1320	1.2060	.7922	.3213	-.0264	-.0966	-.1768	-.1600	.2160	.5290	.5518	-.1546	-.0505	-.2314	-.1744
270.000		.7417							.3718						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1733)

ALPHAO(2) = -8.220 BETAO (1) = -9.940

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0559	-.0484	.0027
30.000	-.0887	-.0667	.0534
60.000	-.0616	-.0674	.0643
90.000	-.0850	-.3778	
120.000	-.0201	.1013	.7268
135.000	.0133	.1769	.4864
150.000	-.0172	.2059	.4872
165.000	-.0589	.1901	.6266
180.000	-.0581	.1616	.4574

ALPHAO(2) = -8.240 BETAO (2) = -7.960

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1730	.7916	.4073	-.0273	-.2993	-.3305	-.3996	-.3550	-.0069	.0363	-.1155	-.2241	-.2087	-.0819	-.0356
30.000			.4895	.0500	-.2474	-.3058	-.3714	-.3377	-.1241	-.2608	-.3641	-.2646	-.1675	- 1375	-.0858
60.000			.6313	.1722	-.1507	-.2119	-.2965	-.2367	.0336	-.3954	-.5165	-.4565	-.2166	-.0979	-.0247
90.000		1.1060	.7883	.3168	-.0375	-.1076	-.1919	.0717	.5431		-.3949	-.2445	-.3062	-.1739	-.0546
120.000			.8909	.4129	.0414	-.0361	-.1269	-.0518	.5240	.1328	.3766	.2944	.1747	.0674	-.0609
135.000								-.0677		.3386		.2595		.0935	
150.000			.9089	.4240	.0519	-.0231	-.1290	-.0700	.3375	.5291	.3746	.2296	.0223	-.0546	-.0755
165.000				.3842	.0184	-.0531	-.1479	-.1096	.2655	.5586	.5857	.1854	.0102	-.1001	-.1061
180.000	1.1730	1.2220	.8113	.3328	-.0212	-.0903	-.1709	-.1555	.2330	.5367	.5746	-.2092	-.0913	-.1864	-.1155
270.000		.7980							.3721						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0292	-.0161	-.0208
30.000	-.0622	-.0333	.0429
60.000	-.0409	-.0109	.0936
90.000	-.0465	-.2332	
120.000	-.0539	.0712	.6847
135.000	-.0151	.1748	.4578
150.000	-.0325	.1981	.4174
165.000	-.0562	.1817	.6114
180.000	-.0617	.1605	.4532

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(2) = -8.240 BETAO (3) = -5.960

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2000	.8187	.4176	-.0159	-.2871	-.3350	-.3892	-.3423	.0065	.0784	-.0719	-.2129	-.2207	-.0504	-.0295
30.000			.4844	.0408	-.2507	-.3083	-.3699	-.3337	-.0932	-.1721	-.2961	-.2583	-.1519	-.1162	-.0659
60.000			.6000	.1378	-.1766	-.2373	-.3143	-.2687	.0339	-.3982	-.5054	-.4393	-.2326	-.0995	-.0469
90.000		1.1280	.7420	.2660	-.0782	-.1455	-.2065	-.0341	.5361		-.5075	-.2680	-.3277	-.2199	-.0794
120.000			.8462	.3665	.0026	-.0707	-.1600	-.1288	.5304	.1645	.3598	.2419	.1363	.0365	-.1056
135.000								-.1068		.3776		.2269		.0582	
150.000			.8839	.3977	.0274	-.0455	-.1470	-.0941	.3376	.5375	.2964	.1541	.0068	-.0664	-.1189
165.000				.3759	.0098	-.0628	-.1553	-.1153	.2876	.5556	.5669	.1003	.0407	-.0927	-.1441
180.000	1.2000	1.2340	.8230	.3355	-.0173	-.0892	-.1709	-.1459	.2548	.5360	.5814	-.2440	-.0222	-.1866	-.1805
270.000		.8499							.4269						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0390	.0066	-.0240
30.000	-.0619	-.0225	.0287
60.000	-.0474	.0040	.1072
90.000	-.0526	-.1102	
120.000	-.0864	.0434	.6181
135.000	-.0445	.1593	.4170
150.000	-.0538	.1816	.3786
165.000	-.0640	.1642	.5484
180.000	-.0530	.1502	.4022

ALPHAO(2) = -8.250 BETAO (4) = -3.980

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2170	.8341	.4290	-.0108	-.2785	-.3300	-.3845	-.3449	.0117	.1030	-.0368	-.2170	-.1867	-.0420	-.0124
30.000			.4757	.0294	-.2548	-.3092	-.3715	-.3288	-.0654	-.0755	-.2556	-.2306	-.1365	-.1122	-.0870
60.000			.5670	.1083	-.1978	-.2552	-.3324	-.2915	.0398	-.3982	-.5392	-.3347	-.2396	-.0100	-.0163
90.000		1.0890	.6928	.2187	-.1128	-.1784	-.2602	-.0341	.5299		-.3673	-.2901	-.2944	-.0792	-.0584
120.000			.8023	.3226	-.0324	-.1030	-.1874	-.1617	.4408	.2055	.3532	.1930	.1029	.0145	-.1248
135.000								-.1327		.4050		.1648		.0225	
150.000			.8601	.3708	.0047	-.0653	-.1675	-.1135	.3364	.5173	.2801	.0442	-.0136	-.0971	-.1534
165.000				.3714	.0065	-.0689	-.1600	-.1234	.2984	.5434	.5540	.0615	.0288	-.1124	-.1503
180.000	1.2170	1.2400	.8348	.3453	-.0104	-.0832	-.1657	-.1361	.2406	.5320	.6064	-.1862	-.0216	-.0989	-.1885
270.000		.8916							.4858						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 OX+T12+S12M25+AT10 EXTERNAL TANK (RD1T33)

ALPHA0(2) = -8.250 BETA0 (4) = -3.980

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0341	-.0157	-.0081
30.000	-.0497	-.0321	.0515
60.000	-.0544	-.0012	.1292
90.000	-.0634	.0073	
120.000	-.1113	.0117	.5321
135.000	-.0751	.1266	.3740
150.000	-.0807	.1554	.3335
165.000	-.0692	.1663	.4758
180.000	-.0507	.1357	.3905

ALPHA0(2) = -8.250 BETA0 (5) = -1.990

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2260	.8449	.4399	-.0033	-.2739	-.3240	-.3812	-.3409	.0164	.1139	-.0131	-.2072	-.1989	-.0430	.0070
30.000			.4665	.0196	-.2614	-.3156	-.3718	-.3240	-.0599	0311	-.1959	-.2281	-.1425	-.0952	-.0529
60.000			.5365	.0815	-.2192	-.2753	-.3496	-.2929	.0326	-.3896	-.5209	-.2881	-.2380	-.0297	-.0163
90.000		1.0440	.6433	.1737	-.1474	-.2127	-.2929	.0876	.5328		-.3325	-.3082	-.2684	-.0774	-.0722
120.000			.7513	.2762	-.0682	-.1384	-.2214	-.1949	.3713	.2441	.3347	.1557	.0621	-.0049	-.1610
133.000								-.1620		.4135		.1149		-.0165	
150.000			.8239	.3375	-.0204	-.0900	-.1890	-.1421	.3284	.4926	.2765	-.0259	-.0866	-.1377	-.1930
165.000				.3555	-.0043	-.0796	-.1701	-.1348	.3078	.5289	.3410	-.0021	.0076	-.1215	-.1329
180.000	1.2290	1.2400	.8368	.3496	-.0096	-.0849	-.1680	-.1086	.2392	.5405	.6060	-.1214	.0200	-.0719	-.1634
270.000		.9443							.5254						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0260	-.0069	-.0186
30.000	-.0578	-.0238	.0452
60.000	-.0497	.0122	.1477
90.000	-.0751	.0454	
120.000	-.1178	-.0462	.4303
135.000	-.0947	.0925	.2737
150.000	-.1059	.1163	.2482
165.000	-.0762	.1301	.4758
180.000	-.0749	.1014	.4196

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHA(2) = -8.250 BETA0 (6) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2280	.8497	.4377	-.0064	-.2737	-.3260	-.3795	-.3441	.0206	.1113	-.0118	-.2121	-.1964	-.0425	.0104
30.000			.4507	.0068	-.2681	-.3226	-.3775	-.3287	-.0291	-.0013	-.1675	-.2351	-.1482	-.0721	-.0371
60.000			.5034	.0515	-.2426	-.2959	-.3682	-.3328	-.0037	-.3803	-.5162	-.2479	-.2377	-.0765	-.0198
90.000		.9944	.5928	.1307	-.1839	-.2441	-.3225	.0487	.5337		-.2817	-.3332	-.1846	-.0921	-.0879
120.000			.7042	.2313	-.1064	-.1749	-.2543	-.2194	.3351	.2957	.2852	.1119	.0289	-.0157	-.1983
135.000								-.1911		.4351		.0762		-.0613	
150.000			.7947	.3057	-.0475	-.1160	-.2112	-.1703	.3730	.5535	.2247	-.0837	-.0404	-.1920	-.2347
165.000				.3414	-.0158	-.0933	-.1824	-.1426	.2576	.5920	.5105	-.0442	-.0071	-.1208	-.1736
180.000	1.2280	1.2410	.8418	.3504	-.0115	-.0844	-.1740	-.1140	.2157	.5345	.5917	-.1255	.0470	-.0939	-.1450
270.000		.9905							.5209						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0232	-.0366	-.0232
30.000	-.0568	-.0201	.0275
60.000	-.0432	.0183	.1601
90.000	-.0633	.0601	
120.000	-.0620	.0006	.3078
135.000	-.0602	.0953	.1741
150.000	-.0797	.0751	.2011
165.000	-.0516	.1027	.3076
180.000	-.0525	.1139	.2637

ALPHA(2) = -8.250 BETA0 (7) = 2.020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2270	.8455	.4384	-.0041	-.2742	-.3249	-.3833	-.3433	.0210	.1023	-.0163	-.2092	-.1864	-.0548	.0105
30.000			.4384	-.0036	-.2748	-.3261	-.3835	-.3293	-.0046	.0299	-.1355	-.2460	-.1595	-.0844	-.0375
60.000			.4718	.0214	-.2594	-.3129	-.3768	-.2759	-.0298	-.3542	-.5142	-.2168	-.1857	-.1313	-.0347
90.000		.9514	.5475	.0912	-.2148	-.2744	-.3464	.0177	.5577		-.2723	-.3420	-.1334	-.0923	-.0915
120.000			.6521	.1821	-.1424	-.2094	-.2868	-.2078	.5243	.2930	.2430	.0845	.0024	-.0404	-.2086
135.000								-.2122		.4446		.0433		-.1017	
150.000			.7509	.2700	-.0759	-.1436	-.2345	-.1975	.3949	.5587	.1561	-.1080	-.0706	-.2103	-.2587
165.000				.3244	-.0295	-.1058	-.1931	-.1546	.2117	.5535	.4780	-.0022	.0003	-.0831	-.1780
180.000	1.2270	1.2360	.8371	.3477	-.0126	-.0857	-.1760	-.1086	.2174	.5051	.5662	-.0855	.0176	-.1090	-.1979
270.000		1.0400							.5206						

X/LT	.7480	.8530	.9280
PHI			

AFC11-716 IA14 O1+T12+S12M25+AT10 EXTERNAL TANK (RB1T33)

ALPHA0(2) = -8.230 BETA0 (7) = 2.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L*	.7460	.8530	.9280
PHI			
.000	-.0268	-.0097	-.0288
30.000	-.0499	-.0112	-.0012
60.000	-.0355	.0223	.1508
90.000	-.0467	.0373	
120.000	-.0350	.0371	.2264
135.000	-.0666	.0650	.1087
150.000	-.0723	.0576	.0723
165.000	-.0611	.0861	.2768
180.000	-.0773	.1108	.2308

ALPHA0(2) = -8.230 BETA0 (8) = 4.040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L*	.0000	.0080	.0490	.1150	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2190	.8335	.4293	-.0089	-.2772	-.3283	-.3837	-.3478	.0033	.0899	-.0294	-.2079	-.2495	-.0590	.0021
30.000			.4202	-.0224	-.2830	-.3326	-.3044	-.3369	.0100	.0684	-.1101	-.2430	-.1743	-.05.'	-.0212
60.000			.4344	-.0076	-.2784	-.3275	-.3831	-.2562	-.0161	-.3126	-.4955	-.2048	-.1555	-.1667	-.0504
90.000		.8971	.4939	.0485	-.2453	-.2987	-.3675	-.0147	.5097		-.2806	-.3551	-.1236	-.1187	-.0922
120.000			.5934	.1327	-.1790	-.2398	-.3144	.0256	.2033	.3508	.2174	.0750	-.0099	-.0709	-.2179
135.000								-.2392		.3934		.0117		-.1245	
150.000			.7086	.2304	-.1030	-.1692	-.2609	-.2229	.2691	.4205	.1725	-.1515	-.0932	-.2503	-.2913
165.000				.3039	-.0455	-.1199	-.2073	-.1713	.2751	.4435	.4531	.0261	.0201	-.0896	-.1839
180.000	1.2190	1.2360	.8313	.3439	-.0158	-.0879	-.1763	-.0924	.2123	.4422	.5533	-.1616	.0015	-.1531	-.1901
270.000		1.0870							.5241						

X/L*	.7460	.8530	.9280
PHI			
.000	-.0335	-.0150	-.0331
30.000	-.0459	-.0111	-.0099
60.000	-.0354	.0154	.1588
90.000	-.0507	.0341	
120.000	-.0577	.0200	.1404
135.000	-.0822	.0216	.0501
150.000	-.0907	.0037	-.0147
165.000	-.0683	.0568	.1669
180.000	-.0875	.0797	.1549

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHA0(2) = -8.220 BETA0 (9) = 6.050

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0030	.0090	.1133	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2030	.8146	.4171	-.0189	-.2826	-.3340	-.3903	-.3570	-.0005	.0767	-.0435	-.2149	-.2394	-.0678	-.0194
30.000			.3999	-.0400	-.2933	-.3418	-.3931	-.3456	.0098	.0739	-.1124	-.2392	-.1756	-.0526	-.0246
60.000			.4006	-.0330	-.2936	-.3418	-.3930	.0844	-.0869	-.2756	-.4713	-.1969	-.1229	-.1636	-.0732
90.000		.8505	.4484	.0108	-.2722	-.3245	-.3850	-.0580	.4551		-.2998	-.3689	-.1059	-.1323	-.0992
120.000			.5452	.0890	-.2110	-.2715	-.3438	.0367	.1190	.3530	.1903	.0509	-.0265	-.0995	-.2375
135.000								-.0757		.3708		-.0241		-.1502	
150.000			.6614	.1902	-.1326	-.1984	-.2875	-.2529	.2196	.3605	.1521	-.2350	-.1009	-.3003	-.3137
165.000				.2760	-.0646	-.1373	-.2239	-.1875	.2433	.4204	.4165	.0187	.0191	-.1138	.2039
180.000	1.2030	1.1900	.8178	.3316	-.0233	-.0957	-.1832	-.0796	.2160	.4062	.5405	-.2086	-.0505	-.1611	-.2310
270.000		1.1320							.5304						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0405	-.0026	-.0286
30.000	-.0585	.0136	-.0241
60.000	-.0538	.0446	.1573
90.000	-.0845	-.0020	
120.000	-.0902	.0063	.1397
135.000	-.1105	.0063	.0479
150.000	-.1140	-.0178	-.0475
165.000	-.1004	.0223	.1715
180.000	-.1135	.0215	.1873

ALPHA0(2) = -8.220 BETA0 (9) = 6.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0087	.0492	.1133	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1720	.7828	.3995	-.0288	-.2916	-.3452	-.4029	-.3699	-.0137	.0607	-.0925	-.2257	-.2286	-.0819	-.0287
30.000			.3665	-.0581	-.3051	-.3528	-.4028	-.3479	.0121	.0566	-.1196	-.2515	-.1812	-.0576	-.0248
60.000			.3655	-.0481	-.3038	-.3508	-.3644	-.1901	-.0935	-.2400	-.4534	-.1951	-.1031	-.1174	-.0526
90.000		.7919	.4011	-.0254	-.2929	-.3442	-.1969	-.0931	.3651		-.3233	-.3837	-.1146	-.1254	-.0882
120.000			.4911	.0536	-.2432	-.3005	-.3691	.0105	.0617	.2957	.1945	.0199	-.0417	-.1339	-.2484
135.000								.0167		.3650		-.0565		-.1890	
150.000			.6166	.1526	-.1607	-.2237	-.3104	-.2299	.1767	.3140	.1597	-.2346	-.1425	-.3444	-.3097
165.000				.2614	-.0816	-.1525	-.2389	-.1981	.2010	.3596	.4090	-.0036	-.0495	-.1464	-.2510
180.000	1.1720	1.1490	.8087	.3252	-.0281	-.1000	-.1861	.0590	.2188	.3643	.5286	-.1672	-.0266	-.1685	-.2556
270.000		1.1700							.5397						

X/LT	.7460	.8530	.9280
PHI			

C4

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(2) = -8.220 BETAO (10) = 8.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0286	-.0283	-.0284
30.000	-.0475	-.0129	-.0362
60.000	-.0441	.0097	.1477
90.000	-.1174	-.0637	
120.000	-.1049	-.0171	.1550
135.000	-.1299	.0068	.0482
150.000	-.1365	-.0160	-.0573
165.000	-.1294	.0031	.1482
180.000	-.1547	-.0036	.1451

ALPHAO(2) = -8.220 BETAO (11) = 10.130

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1410	.7523	.3817	-.0394	-.3100	-.3643	-.4219	-.3931	-.0380	-.0191	-.1532	-.2311	-.1864	-.0849	-.0298
30.000			.3399	-.0783	-.3269	-.3720	-.4212	-.1827	-.0310	.0421	-.1467	-.2673	-.1400	-.0418	-.0449
60.000			.3360	-.0848	-.3248	-.3669	-.2495	-.1130	-.0960	-.2145	-.4168	-.1713	-.0755	-.0656	-.0594
90.000		.7443	.3613	-.0646	-.3205	-.3671	-.0941	-.1208	.2479		-.3262	-.3965	-.1374	-.0982	-.1143
120.000			.4429	.0091	-.2784	-.3345	-.2367	-.0263	.0192	.2141	.2146	-.0129	-.0512	-.1447	-.2717
135.000								-.0080		.3321		-.0878		-.2150	
150.000			.5711	.1175	-.1928	-.2540	-.3385	-.1231	.1271	.2667	.1080	-.3250	-.1663	-.3564	-.3533
165.000				.2334	-.1028	-.1722	-.2583	-.2101	.1488	.2869	.4302	-.0267	-.0758	-.1918	-.2693
180.000	1.1410	1.1020	.7949	.3152	-.0350	-.1074	-.1938	-.0488	.1673	.3202	.5019	-.1209	-.0484	-.2600	-.3130
270.000		1.2070							.5463						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0597	-.0564	-.0004
30.000	-.0763	-.0290	-.0309
60.000	-.0735	-.0129	.1493
90.000	-.1590	-.1023	
120.000	-.1226	-.0434	.1182
135.000	-.1471	-.0173	.0169
150.000	-.1562	-.0400	-.0856
165.000	-.1599	-.0345	.1027
180.000	-.2063	-.0574	.1092

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1733)

ALPHAO(3) = -6.280 BETAO (1) = -9.970

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1640	.8108	.4342	.0001	-.2854	-.3400	-.4007	-.3694	-.0649	.0009	-.1525	-.2509	-.1798	-.0922	-.0367
30.000			.5517	.0987	-.2096	-.2706	-.3415	-.3061	-.0821	-.2528	-.4743	-.1832	-.1505	-.1693	-.0893
60.000			.7091	.2406	-.0971	-.1621	-.2467	-.1848	.1134	-.3184	-.5571	-.3416	-.1918	.0467	-.0048
90.000		1.2340	.8568	.3767	.0105	-.0632	-.1503	.2042	.5802		-.5808	-.2172	-.2757	-.0615	-.0043
120.000			.9167	.4368	.0600	-.0180	-.1093	-.0359	.4825	.0381	.2182	.3467	.2230	.1054	-.0045
135.000								-.0520		.1784		.2898		.1152	
150.000			.8914	.4108	.0377	-.0371	-.1360	-.0823	.2862	.4461	.4208	.2306	.0218	-.0328	-.0328
165.000				.3393	-.0190	-.0930	-.1801	-.1435	.1446	.4996	.5601	.2533	-.0172	-.0961	-.0737
180.000	1.1640	1.1760	.7471	.2724	-.0660	-.1343	-.2117	-.1954	.1854	.5007	.5314	-.1620	-.0277	-.2413	-.1713
270.000		.7677							.3193						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0651	-.0749	.0090
30.000	-.0828	-.0564	.0378
60.000	-.0373	-.0164	.0948
90.000	-.0563	-.2871	
120.000	-.0380	.0901	.7546
135.000	-.0035	.2043	.5137
150.000	-.0237	.2455	.5419
165.000	-.0509	.2343	.6330
180.000	-.0462	.1960	.4499

ALPHAO(3) = -6.280 BETAO (2) = -[illegible]90

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1960	.8414	.4501	.0100	-.2705	-.3243	-.3854	-.3499	-.0586	.0682	-.1066	-.2409	-.1782	-.1014	-.0503
30.000			.5416	.0898	-.2132	-.2741	-.3432	-.3074	-.0505	-.2136	-.3730	-.1577	-.1287	-.1560	-.0900
60.000			.6719	.2018	-.1237	-.1895	-.2728	-.2465	.1160	-.3171	-.5750	-.3285	-.2150	.0360	-.0062
90.000		1.1910	.8019	.3233	-.0319	-.1018	-.1887	-.0229	.5714		-.5658	-.2414	-.2924	-.0581	-.0310
120.000			.8713	.3893	.0212	-.0540	-.1426	-.0721	.4846	.0703	.1803	.2902	.1761	.0750	-.0551
135.000								-.0896		.2595		.2432		.0914	
150.000			.8661	.3857	.0171	-.0578	-.1551	-.1070	.2963	.4817	.3296	.2461	.0145	-.0558	-.0676
165.000				.3365	-.0217	-.0939	-.1827	-.1479	.1929	.5217	.5551	.1799	-.0034	-.1080	-.1058
180.000	1.1980	1.1850	.7635	.2858	-.0598	-.1281	-.2059	-.1893	.1672	.5062	.5580	-.2175	-.0702	-.1919	-.1118
270.000		.8209							.4226						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(3) = -6.280 BETAO (2) = -7.990

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0353	-.0347	.0127
30.000	-.0776	-.0281	.0499
60.000	-.0460	.0203	.1097
90.000	-.0551	-.0245	
120.000	-.0752	.0656	.6992
135.000	-.0332	.2040	.4900
150.000	-.0423	.2381	.4599
165.000	-.0551	.2257	.6016
180.000	-.0554	.1982	.4489

ALPHAO(3) = -6.300 BETAO (3) = -6.000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2240	.8689	.4641	.0182	-.2628	-.3166	-.3716	-.3311	-.0490	.1090	-.0598	-.2206	-.1847	-.0740	-.0280
30.000			.5348	.0788	-.2217	-.2814	-.3452	-.3061	-.0238	-.1347	-.3095	-.1713	-.1169	-.1256	-.0990
60.000			.6410	.1692	-.1499	-.2139	-.2944	-.2625	.1176	-.3126	-.5569	-.2973	-.2123	.0180	-.0092
90.000		1.1520	.7540	.2744	-.0692	-.1398	-.2211	-.1343	.5655		-.5016	-.2622	-.2912	-.0494	-.0517
120.000			.8273	.3459	-.0143	-.0875	-.1730	-.1089	.4859	.1039	.1160	.2389	.1352	.0523	-.0962
135.000								-.1315		.3131		.2065		.0661	
150.000			.8413	.3558	-.0055	-.0783	-.1756	-.1242	.2819	.5059	.2581	.1451	-.0002	-.0640	-.1054
165.000				.3257	-.0283	-.0997	-.1876	-.1533	.2241	.5249	.5508	.1026	.0512	-.0998	-.1338
180.000	1.2240	1.1970	.7734	.2856	-.0541	-.1255	-.2034	-.1817	.1816	.4932	.5749	-.2497	-.0085	-.1881	-.1707
270.000		.8770							.5176						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0406	-.0181	.0204
30.000	-.0631	-.0364	.0589
60.000	-.0458	.0288	.1156
90.000	-.0667	.0548	
120.000	-.1072	.0431	.6759
135.000	-.0672	.1885	.4625
150.000	-.0652	.2159	.4253
165.000	-.0549	.2023	.5512
180.000	-.0458	.1823	.4055

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(3) = -6.260 BETAO (4) = -3.980

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2460	.8859	.4778	.0247	-.2545	-.3067	-.3649	-.3280	.0063	.1294	-.0286	-.2019	-.2026	-.0595	.0019
30.000			.5239	.0689	-.2275	-.2852	-.3475	-.3022	-.0046	-.0396	-.2421	-.2116	-.1093	-.1135	-.0753
60.000			.6076	.1402	-.1733	-.2338	-.3098	-.2721	.1245	-.3062	-.5320	-.2703	-.2333	-.0121	-.0025
90.000		1.1140	.7080	.2279	-.1038	-.1697	-.2502	-.1592	.5603		-.4979	-.2857	-.2684	-.0461	-.0599
120.000			.7852	.3030	-.0484	-.1191	-.2027	-.1748	.4748	.1361	.0825	.1915	.0984	.0224	-.1315
135.000								-.1553		.3471		.1469		.0240	
150.000			.8196	.3287	-.0254	-.0967	-.1933	-.1418	.2885	.4899	.2149	.0468	-.0118	-.0925	-.1474
165.000				.3184	-.0338	-.1046	-.1938	-.1582	.2489	.4907	.5230	.0312	.0154	-.1155	-.1419
180.000	1.2460	1.2020	.7834	.2928	-.0492	-.1202	-.2001	-.1681	.1786	.4609	.5829	-.1958	-.0307	-.0892	-.1871
270.000		.9235							.5656						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0338	-.0207	-.0040
30.000	-.0515	-.0268	.0516
60.000	-.0440	.0275	.1214
90.000	-.0847	.0777	
120.000	-.1296	.0470	.5840
135.000	-.0868	.1614	.4143
150.000	-.0833	.1906	.3727
165.000	-.0687	.2015	.4710
180.000	-.0464	.1630	.3930

ALPHAO(3) = -6.160 BETAO (5) = .030

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2610	.8977	.4853	.0337	-.2461	-.2979	-.3551	-.3186	-.0241	.1352	-.0020	-.1884	-.2288	-.0480	.0228
30.000			.4975	.0471	-.2431	-.2949	-.3510	-.3077	.0130	.0335	-.1502	-.2482	-.1457	-.0635	-.0265
60.000			.5410	.0818	-.2188	-.2745	-.3426	-.2869	.1505	-.2703	-.4993	-.1921	-.1463	-.1290	-.0152
90.000		1.0230	.6103	.1465	-.1739	-.2336	-.3111	.0219	.5677		-.4990	-.3294	-.1554	-.0844	-.0779
120.000			.6894	.2124	-.1170	-.1828	-.2622	-.2339	.2565	.2276	.0436	.1072	.0234	-.0090	-.1833
135.000								-.2100		.3674		.0527		-.0434	
150.000			.7531	.2638	-.0759	-.1412	-.2365	-.1897	.2760	.4272	.1836	-.0713	-.0409	-.1744	-.2247
165.000				.2904	-.0547	-.1249	-.2128	-.1756	.2781	.4875	.4710	-.0391	-.0103	-.1139	-.1681
180.000	1.2610	1.1980	.7877	.2963	-.0501	-.1198	-.2066	-.1507	.1777	.4490	.5608	-.1381	.0475	-.0854	-.1376
270.000		1.0200							.5590						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(3) = -6.130 BETAO (5) = .030

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0137	-.0098	-.0092
30.000	-.0431	-.0137	.0215
60.000	-.0325	.0340	.1370
90.000	-.0739	.0798	
120.000	-.0609	.0345	.3243
135.000	-.0546	.1102	.1932
150.000	-.0666	.1008	.1948
165.000	-.0548	.1240	.2843
180.000	-.0440	.1315	.2559

ALPHAO(3) = -6.320 BETAO (6) = 2.000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2570	.8964	.4826	.0330	-.2519	-.3036	-.3594	-.3238	-.0332	.1292	-.0100	-.1928	-.2287	-.0499	.0192
30.000			.4798	.0294	-.2560	-.3077	-.3630	-.3155	.0092	.0664	-.1205	-.2539	-.1595	-.0493	-.0084
60.000			.5047	.0478	-.2416	-.2944	-.3556	-.3022	.1509	-.2560	-.4928	-.1739	-.1102	-.1509	-.0355
90.000		.9781	.5639	.1051	-.2071	-.2642	-.3381	.0290	.5776		-.3485	-.3500	-.1183	-.1061	-.0828
120.000			.6419	.1745	-.1528	-.2153	-.2910	-.2414	.2583	.2752	.1951	.0750	-.0028	-.0350	-.2005
135.000								-.2247		.3959		.0249		-.0891	
150.000			.7210	.2373	-.1019	-.1657	-.2541	-.2138	.3289	.4881	.1382	-.1114	-.0632	-.1984	-.2531
165.000				.2788	-.0650	-.1378	-.2231	-.1826	.2082	.4906	.4462	-.0199	-.0095	-.0742	-.1613
180.000	1.2570	1.2000	.7897	.2991	-.0522	-.1214	-.2082	-.1409	.1830	.4321	.5305	-.1120	.0139	-.0975	-.1833
270.000		1.0650							.5566						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0215	-.0164	-.0103
30.000	-.0421	-.0055	.0080
60.000	-.0272	.0289	.1364
90.000	-.0364	.0711	
120.000	-.0244	.0539	.2377
135.000	-.0544	.0784	.1179
150.000	-.0586	.0711	.0785
165.000	-.0516	.1025	.2705
180.000	-.0660	.1296	.2221

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(3) = -6.330 BETAO (7) = 4.070

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2430	.8843	.4738	.0245	-.2534	-.3079	-.3659	-.3319	-.0222	.1165	-.0244	-.2003	-.2203	-.0835	.0040
30.000			.4591	.0066	-.2646	-.3186	-.3693	-.3282	.0248	.0806	-.1000	-.2675	-.1762	-.0517	-.0007
60.000			.4648	.0156	-.2600	-.3120	-.3634	-.3071	.1288	-.2291	-.4643	-.1641	-.0958	-.1470	-.0628
90.000		.9255	.5107	.0566	-.2362	-.2923	-.3603	.0035	.5831		-.3171	-.3662	-.1176	-.1376	-.0822
120.000			.5866	.1279	-.1869	-.2477	-.3191	-.1148	.1592	.3193	.2149	.0466	-.0257	-.0675	-.2124
135.000								-.2631		.2541		-.0134		-.1211	
150.000			.6784	.1974	-.1275	-.1897	-.2816	-.2422	.2281	.3645	.1292	-.1846	-.1008	-.2488	-.2909
165.000				.2566	-.0797	-.1523	-.2370	-.2014	.2502	.3884	.4201	-.0022	-.0077	-.0827	-.1855
180.000	1.2430	1.1980	.7806	.2970	-.0541	-.1244	-.2109	-.1322	.1809	.3931	.5159	-.1822	-.0087	-.1549	-.1839
270.000		1.1110							.5533						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0406	-.0244	-.0058
30.000	-.0421	-.0058	.0015
60.000	-.0385	.0265	.1362
90.000	-.0416	.0557	
120.000	-.0484	.0390	.1536
135.000	-.0699	.0431	.0658
150.000	-.0768	.0249	.0025
165.000	-.0600	.0765	.1812
180.000	-.0842	.1028	.1711

ALPHAO(3) = -6.360 BETAO (8) = 6.050

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2240	.8646	.4607	.0159	-.2620	-.3171	-.3748	-.3458	-.0163	.0978	-.0375	-.2187	-.2033	-.0835	-.0249
30.000			.4283	-.0098	-.2825	-.3325	-.3845	-.3450	.0417	.0625	-.1003	-.2749	-.1841	-.0541	-.0134
60.000			.4273	-.0111	-.2823	-.3297	-.3685	-.2436	.0854	-.1935	-.4337	-.1757	-.0930	-.1232	-.0837
90.000		.8713	.4610	.0201	-.2648	-.3174	-.3791	-.0335	.5258		-.3169	-.3866	-.1016	-.1496	-.0918
120.000			.5352	.0880	-.2187	-.2797	-.3460	.0240	.0937	.3274	.1659	.0175	-.0473	-.1020	-.2320
135.000								-.0780		.2627		-.0528		-.1507	
150.000			.6306	.1638	-.1559	-.2192	-.3069	-.2683	.2017	.3267	.1108	-.2736	-.1140	-.3010	-.2990
165.000				.2329	-.0998	-.1705	-.2537	-.2178	.2191	.3843	.3848	-.0103	-.0074	-.1149	-.2012
180.000	1.2240	1.1560	.7684	.2819	-.0626	-.1326	-.2173	-.1130	.1947	.3674	.5028	-.2248	-.0620	-.1721	-.2291
270.000		1.1550							.5597						

X/LT	.7460	.8530	.9280
PHI			

AP-11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(3) = -6.360 BETAO (8) = 6.050

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0442	-.0110	.0129
30.000	-.0429	.0205	-.0035
60.000	-.0576	.0372	.1435
90.000	-.0707	.0268	
120.000	-.0764	.0314	.1696
135.000	-.0976	.0299	.0677
150.000	-.1018	.0109	-.0291
165.000	-.0921	.0487	.1761
180.000	-.1052	.0471	.2079

ALPHAO(3) = -6.270 BETAO (9) = 8.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1970	.8326	.4427	.0043	-.2689	-.3216	-.3834	-.3599	-.0251	.0753	-.0758	-.2299	-.2034	-.1005	-.0499
30.000			.3968	-.0326	-.2932	-.3405	-.3908	-.3578	.0355	.0761	-.1070	-.2664	-.1816	-.0632	-.0163
60.000			.3880	-.0384	-.2976	-.3407	-.3990	-.1905	.0571	-.1659	-.3994	-.1847	-.0942	-.0895	-.0627
90.000		.8167	.4178	-.0167	-.2886	-.3369	-.3867	-.0695	.4575		-.3226	-.4030	-.0947	-.1333	-.0867
120.000			.4878	.0481	-.2490	-.3057	-.3742	.0020	.0412	.2970	.1390	-.0117	-.0622	-.1393	-.2440
135.000								.0049		.2900		-.0820		-.1888	
150.000			.5917	.1284	-.1823	-.2439	-.3314	-.2350	.1719	.2856	.1273	-.3205	-.1467	-.3453	-.2906
165.000				.2094	-.1181	-.1843	-.2705	-.2335	.1789	.3298	.3619	-.0324	-.0695	-.1490	-.2493
180.000	1.1970	1.1050	.7575	.2757	-.0715	-.1385	-.2243	-.0998	.1916	.3194	.4873	-.1892	-.0079	-.1930	-.2574
270.000		1.1930							.5693						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0311	-.0460	.0060
30.000	-.0275	-.0078	-.0079
60.000	-.0523	.0058	.1459
90.000	-.1140	-.0361	
120.000	-.0965	-.0028	.1973
135.000	-.1174	.0282	.0732
150.000	-.1200	.0084	-.0351
165.000	-.1200	.0284	.1673
180.000	-.1439	.0200	.1746

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(3) = -6.260 BETAO (10) = 10.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1680	.8029	.4263	-.0025	-.2797	-.3360	-.3951	-.3756	-.0358	.0090	-.1272	-.2414	-.1808	-.0943	-.0353
30.000			.3708	-.0552	-.3089	-.3570	-.4081	-.3662	-.0090	.0569	-.1445	-.2790	-.1670	-.0423	-.0277
60.000			.3599	-.0641	-.3127	-.3529	-.4128	-.1117	-.0340	-.1402	-.3693	-.1897	-.0589	-.0426	-.0661
90.000		.7702	.3772	-.0464	-.3109	-.3565	-.1494	-.0961	.0475		-.3426	-.4160	-.0691	-.0761	-.1100
120.000			.4417	.0094	-.2782	-.3319	-.3480	-.0329	-.0039	.2208	.1307	-.0394	-.0646	-.1445	-.2616
135.000								-.0093		.3180		-.1126		-.2163	
150.000			.5503	.0944	-.2096	-.2695	-.3532	-.0662	.1332	.2449	.0900	-.3603	-.1743	-.3571	-.3447
165.000				.1903	-.1345	-.2006	-.2960	-.2442	.1308	.2700	.3812	-.0546	-.0667	-.2061	-.2671
180.000	1.1680	1.0620	.7472	.2651	-.0739	-.1432	-.2280	-.0862	.1360	.2822	.4636	-.1328	-.0460	-.2707	-.3141
270.000		1.2320							.5773						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0626	-.0768	.0004
30.000	-.0547	-.0210	-.0054
60.000	-.0725	-.0120	.1514
90.000	-.1608	-.0736	
120.000	-.1085	-.0228	.1561
135.000	-.1357	.0137	.0491
150.000	-.1426	-.0053	-.0606
165.000	-.1475	-.0015	.1334
180.000	-.1950	-.0276	.1459

ALPHAO(4) = -4.200 BETAO (1) = -9.980

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1860	.8651	.4840	.0407	-.2584	-.3155	-.3773	-.3542	-.1405	.0348	-.1236	-.2221	-.1925	-.1250	-.0461
30.000			.6074	.1441	-.1741	-.2386	-.3126	-.2739	-.0126	-.1974	-.4588	-.1520	-.1346	-.1442	-.0838
60.000			.7521	.2750	-.0711	-.1389	-.2273	-.1823	.1866	-.2530	-.4917	-.3011	-.1520	.0384	.0194
90.000		1.2520	.8657	.3794	.0122	-.0632	-.1508	.1319	.5017		-.5532	-.2267	-.2771	-.0519	-.0046
120.000			.8904	.4050	.0335	-.0442	-.1330	-.0645	.4354	-.0172	-.0480	.3411	.2320	.1108	-.0059
135.000								-.0894		.0322		.2648		.1100	
150.000			.8419	.3589	-.0069	-.0778	-.1738	-.1209	.2374	.3395	.3617	.1905	.0266	-.0309	-.0325
165.000				.2887	-.0643	-.1373	-.2199	-.1844	.0903	.4612	.5199	.2347	-.0111	-.0944	-.0679
180.000	1.1860	1.1340	.6959	.2187	-.1102	-.1767	-.2514	-.2284	.1554	.4747	.5088	-.1770	-.0164	-.2530	-.1733
270.000		.7887							.4443						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T35)

ALPHAO(4) = -4.200 BETAO (1) = -9.980

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0588	-.0781	.0012
30.000	-.0589	-.0371	.0165
60.000	-.0145	.0856	.1306
90.000	-.0463	-.1026	
120.000	-.0455	.0819	.7808
135.000	-.0086	.2372	.5257
150.000	-.0100	.2748	.5767
165.000	-.0206	.2690	.6191
180.000	-.0121	.2222	.4463

ALPHAO(4) = -4.230 BETAO (2) = -7.990

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.2210	.8974	.5009	.0515	-.2361	-.2907	-.3515	-.3318	-.1502	.0944	-.0737	-.2176	-.1920	-.1350	-.0527
30.000			.5977	.1330	-.1727	-.2353	-.3041	-.2769	.0130	-.1520	-.3562	-.1337	-.1238	-.1230	-.1084
60.000			.7166	.2354	-.0920	-.1562	-.2500	-.2032	.1942	-.2379	-.5029	-.2596	-.1819	.0212	.0070
90.000		1.2140	.8145	.3298	-.0211	-.0917	-.1842	-.0963	.2968		-.5422	-.2437	-.2863	-.0364	-.0392
120.000			.8463	.3622	.0034	-.0688	-.1618	-.0955	.4365	.0056	-.1023	.2755	.1846	.0801	-.0548
135.000								-.1222		.1400		.2141		.0971	
150.000			.8219	.3351	-.0178	-.0881	-.1877	-.1399	.2482	.4207	.2842	.2128	.0146	-.0369	-.0844
165.000				.2891	-.0580	-.1299	-.2186	-.1837	.1177	.4939	.5207	.1630	-.0133	-.1174	-.1001
180.000	1.2210	1.1430	.7098	.2337	-.0928	-.1590	-.2391	-.2222	.1104	.4774	.5430	-.2303	-.0253	-.1924	-.1097
270.000		.8435							.5614						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0371	-.0316	.0167
30.000	-.0707	-.0119	.0471
60.000	-.0368	.0788	.1324
90.000	-.0620	.0667	
120.000	-.0829	.0960	.7004
135.000	-.0416	.2334	.5028
150.000	-.0332	.2677	.4949
165.000	-.0374	.2577	.6109
180.000	-.0260	.2276	.4529

ARC11-716 IA14 OG+T12+S12N25+AT10 EXTERNAL TANK (RB1733)

ALPHAO(4) = -4.180 BETAO (3) = -5.970

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2470	.9280	.5186	.0615	-.2288	-.2843	-.3460	-.3165	-.1260	.1415	-.0438	-.2018	-.1930	-.0988	-.0139
30.000			.5910	.1252	-.1837	-.2439	-.3125	-.2813	.0308	-.0859	-.2969	-.1546	-.1023	-.1181	-.0965
60.000			.6837	.2047	-.1194	-.1826	-.2739	-.2257	.1943	-.2383	-.4951	-.2295	-.2098	.0012	-.0030
90.000		1.1750	.7676	.2824	-.0595	-.1292	-.2183	-.1490	.5300		-.5292	-.2653	-.2725	-.0434	-.0516
120.000			.8066	.3185	-.0313	-.1018	-.1927	-.1276	.4394	.0339	-.1085	.2246	.1396	.0601	-.0965
135.000								-.1472		.2298		.1636		.0688	
150.000			.7962	.3079	-.0393	-.1191	-.2107	-.1543	.2530	.4504	.2271	.1446	-.0129	-.0670	-.0970
165.000				.2748	-.0672	-.1338	-.2260	-.1908	.1794	.4918	.5173	.1053	-.0057	-.1100	-.1246
180.000	1.2470	1.1520	.7231	.2377	-.0923	-.1597	-.2392	-.2120	.1420	.4499	.5532	-.2634	.0474	-.1995	-.1578
270.000		.9009							.6025						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0410	-.0086	.0200
30.000	-.0540	-.0195	.0571
60.000	-.0330	.0677	.1215
90.000	-.0635	.0939	
120.000	-.1084	.0661	.6634
135.000	-.0667	.2102	.4761
150.000	-.0443	.2415	.4514
165.000	-.0374	.2351	.5723
180.000	-.0131	.2123	.4266

ALPHAO(4) = -4.170 BETAO (4) = -3.850

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5380	.6380
PHI															
.000	1.2710	.9398	.5288	.0659	-.2246	-.2769	-.3425	-.3145	-.0728	.1558	-.0151	-.1908	-.2148	-.0847	.0101
30.000			.5772	.1104	-.1931	-.2537	-.3190	-.2855	.0338	.0138	-.2463	-.2142	-.1089	-.1052	-.0550
60.000			.6454	.1709	-.1477	-.2078	-.2939	-.2429	.2009	-.2275	-.4803	-.2105	-.2092	-.0495	-.0009
90.000		1.1340	.7188	.2320	-.0986	-.1642	-.2482	-.1838	.5855		-.5156	-.2865	-.2385	-.0457	-.0611
120.000			.7622	.2722	-.0651	-.1330	-.2226	-.1618	.4404	.0654	-.1185	.1644	.0919	.0407	-.1260
135.000								-.1830		.2679		.1101		.0404	
150.000			.7740	.2770	-.0594	-.1273	-.2268	-.1745	.2358	.4657	.1698	.0428	-.0111	-.0884	-.1369
165.000				.2650	-.0757	-.1412	-.2318	-.1959	.2006	.4454	.5073	.0170	.0315	-.1213	-.1287
180.000	1.2710	1.1550	.7290	.2357	-.0891	-.1582	-.2392	-.2022	.1443	.3970	.5509	-.2236	-.0050	-.0701	-.1862
270.000		.9459							.6022						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (R81T33)

ALPHA0(4) = -4.170 BETA0 (4) = -3.990

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0309	-.0215	-.0084
30.000	-.0329	-.0145	.0408
60.000	-.0306	.0604	.1011
90.000	-.0762	.1308	
120.000	-.1271	.0477	.6231
135.000	-.0836	.1838	.4333
150.000	-.0656	.2137	.4005
165.000	-.0483	.2224	.4833
180.000	-.0273	.1896	.3910

ALPHA0(4) = -4.190 BETA0 (5) = -2.020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2830	.9530	.5352	.0738	-.2214	-.2749	-.3392	-.3051	-.1096	.1644	.0069	-.1796	-.2390	-.0688	.0238
30.000			.5636	.0982	-.2040	-.2619	-.3268	-.2861	.0272	.0554	-.1988	-.2307	-.1159	-.0845	-.0299
60.000			.6128	.1440	-.1729	-.2325	-.3096	-.2602	.2104	-.2150	-.4526	-.1798	-.1231	-.1140	-.0053
90.000		1.0910	.6725	.1969	-.1324	-.1952	-.2731	-.2134	.5869		-.5042	-.3000	-.1915	-.0509	-.0652
120.000			.7181	.2374	-.0971	-.1646	-.2446	-.2179	.4156	.1028	-.0961	.1398	.0462	.0227	-.1500
135.000								-.2029		.3110		.0478		.0090	
150.000			.7473	.2529	-.0808	-.1480	-.2391	-.1899	.2415	.4311	.1460	-.0211	-.0354	-.1150	-.1717
165.000				.2527	-.0828	-.1477	-.2340	-.2000	.2278	.4174	.4680	-.0104	-.0093	-.1169	-.1354
180.000	1.2830	1.1590	.7354	.2444	-.0875	-.1568	-.2362	-.1976	.1768	.3950	.5227	-.1505	-.0282	-.0795	-.1288
270.000		.9959							.5946						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0140	-.0114	-.0080
30.000	-.0426	-.0141	.0368
60.000	-.0220	.0463	.1080
90.000	-.0811	.0950	
120.000	-.1166	.0514	.4676
135.000	-.0779	.1521	.3211
150.000	-.0825	.1701	.2870
165.000	-.0511	.1791	.4911
180.000	-.0309	.1471	.4068

ARC11-715 IA14 C1+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHA0(6) = -4.080 BETA0 (6) = -.010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2850	.9542	.5332	.0766	-.2120	-.2682	-.3303	-.3027	-.1124	.1650	.0125	-.1755	-.2448	-.0618	.0269
30.000			.5434	.0834	-.2095	-.2672	-.3277	-.2943	.0164	.0941	-.1480	-.2264	-.1292	-.0754	-.0124
60.000			.5747	.1092	-.1919	-.2476	-.3246	-.2797	.2070	-.1952	-.4295	-.1494	-.0815	-.1409	-.0272
90.000		1.0440	.6236	.1568	-.1605	-.2216	-.3006	-.2285	.5880		-.4932	-.3201	-.1433	-.0622	-.0704
120.000			.6750	.2001	-.1244	-.1881	-.2713	-.2446	.2921	.1401	-.0734	.1037	.0006	.0101	-.1578
135.000								-.2256		.3433		.0085		-.0299	
150.000			.7151	.2270	-.1000	-.1628	-.2578	-.2111	.2443	.3637	.1773	-.0927	-.0517	-.1496	-.2099
165.000				.2497	-.0879	-.1525	-.2425	-.2087	.2908	.4065	.4275	-.0205	-.0176	-.1016	-.1551
180.000	1.2850	1.1560	.7361	.2499	-.0845	-.1512	-.2386	-.1839	.1555	.3745	.5142	-.1454	.0146	-.0783	-.1337
270.000		1.0430							.5795						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0100	-.0066	.0069
30.000	-.0330	-.0093	.0180
60.000	-.0171	.0376	.1163
90.000	-.0518	.0859	
120.000	-.0367	.0553	.3252
135.000	-.0312	.1319	.2119
150.000	-.0470	.1253	.1971
165.000	-.0308	.1469	.2758
180.000	-.0212	.1514	.2542

ALPHA0(6) = -4.210 BETA0 (7) = 2.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2800	.9532	.5349	.0741	-.2230	-.2792	-.3393	-.3059	-.1045	.1510	.0004	-.1795	-.2366	-.0674	.0215
30.000			.5285	.0665	-.2274	-.2841	-.3445	-.3059	.0318	.0931	-.1241	-.2294	-.1538	-.0701	.0062
60.000			.5385	.0760	-.2225	-.2781	-.3374	-.2990	.2021	-.1950	-.4021	-.1301	-.0631	-.1197	-.0615
90.000		1.0000	.5765	.1126	-.1988	-.2584	-.3295	-.2646	.5915		-.4964	-.3401	-.1184	-.0995	-.0796
120.000			.6296	.1623	-.1614	-.2253	-.3011	-.2723	.1754	.2016	-.0575	.0714	-.0290	-.0214	-.1797
135.000								-.2524		.3184		-.0180		-.0716	
150.000			.6852	.2013	-.1281	-.1913	-.2802	-.2387	.2367	.3899	.1085	-.1466	-.0583	-.1803	-.2381
165.000				.2376	-.1023	-.1707	-.2535	-.2217	.2372	.4073	.4052	-.0338	-.0175	-.0713	-.1420
180.000	1.2800	1.1550	.7352	.2462	-.0916	-.1590	-.2426	-.1746	.1705	.3806	.4917	-.1384	.0157	-.0881	-.1661
270.000		1.0880							.5811						

X/LT	.7480	.8530	.9280
PHI			

ARC1Y-T16 IA14 C1+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHA0(4) = -4.210 BETA0 (7) = 2.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0166	-.0160	-.0026
30.000	-.0272	-.0074	.0155
60.000	-.0182	.0367	.1106
90.000	-.0195	.0828	
120.000	-.0121	.0682	.2459
135.000	-.0380	.0997	.1555
150.000	-.0372	.0923	.0907
165.000	-.0324	.1230	.2716
180.000	-.0433	.1484	.2271

ALPHA0(4) = -4.200 BETA0 (9) = 4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2650	.9367	.5252	.0660	-.2294	-.2843	-.3504	-.3164	-.0897	.1376	-.0056	-.1812	-.2250	-.0917	.0067
30.000			.4983	.0439	-.2481	-.3004	-.3577	-.3230	.0497	.1063	-.1027	-.2412	-.1755	-.0619	.0041
60.000			.4951	.0432	-.2489	-.2991	-.3564	-.3108	.2261	-.1559	-.3801	-.1096	-.0667	-.0845	-.0747
90.000		.9462	.5255	.0644	-.2301	-.2856	-.3548	.0025	.6075		-.4895	-.3645	-.1107	-.1371	-.0808
120.000			.5786	.1183	-.1984	-.2573	-.3270	-.0858	.1260	.2548	-.0066	.0323	-.0496	-.0514	-.1945
135.000								-.2743		.2066		-.1466		-.1073	
150.000			.6445	.1693	-.1560	-.2148	-.3034	-.2605	.1919	.3215	.1070	-.2267	-.0877	-.2228	-.2743
165.000				.2102	-.1175	-.1860	-.2700	-.235'	.2169	.3416	.3919	-.0306	-.0488	-.0614	-.1769
180.000	1.2650	1.1530	.7294	.2432	-.0966	-.1533	-.2470	-.1673	.1595	.3527	.4849	-.2060	-.0176	-.1501	-.1682
270.000		1.1290							.5841						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0342	-.0313	-.0021
30.000	-.0246	-.0076	.0127
60.000	-.0455	.0221	.1024
90.000	-.0223	.0724	
120.000	-.0286	.0615	.1737
135.000	-.0520	.0695	.0897
150.000	-.0574	.0467	.0252
165.000	-.0438	.0993	.1982
180.000	-.0646	.1231	.1871

ARC11-716 IA14 01+T12+S12N25+A710 EXTERNAL TANK (RB1T33)

ALPHAO(4) = -4.210 BETAO (9) = 6.060

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0030	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2440	.9202	.5106	.0556	-.2313	-.2917	-.3545	-.3236	-.0873	.1217	-.0177	-.1944	-.2106	- 1218	-.0232
30.000			.4664	.0186	-.2606	-.3150	-.3690	-.3349	.0642	.1209	-.1095	-.2615	-.1837	-.0678	-.0041
60.000			.4545	.0072	-.2650	-.3161	-.3841	-.2826	.1756	-.1191	-.3590	-.1163	-.0771	-.0678	-.0551
90.000		.8931	.4729	.0254	-.2554	-.3106	-.3770	-.0091	.5696		-.4415	-.3867	-.1155	-.1697	-.0874
120.000			.5232	.0770	-.2261	-.2847	-.3526	.0099	.0657	.2952	.1333	-.0084	-.0708	-.0935	-.2081
135.000								-.0847		.1362		-.0793		-.1400	
150.000			.5982	.1335	-.1807	-.2385	-.3246	-.2800	.1707	.3023	.0778	-.3060	-.1230	-.2880	-.2750
165.000				.1885	-.1342	-.2009	-.2829	-.2501	.1889	.3394	.3465	-.0393	-.0534	-.1039	-.1957
180.000	1.2440	1.1150	.7142	.2268	-.1026	-.1687	-.2522	-.1553	.1710	.3173	.4668	-.2317	-.0537	-.1710	-.2182
270.000		1.1790							.5908						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0460	-.0238	.0191
30.000	-.0288	.0255	.0149
60.000	-.0567	.0353	.1010
90.000	-.0490	.0664	
120.000	-.0638	.0551	.1948
135.000	-.0795	.0564	.0849
150.000	-.0802	.0329	-.0126
165.000	-.0719	.0712	.2004
180.000	-.0841	.0691	.2376

ALPHAO(4) = -4.200 BETAO (10) = 8.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2180	.8672	.4909	.0463	-.2446	-.2998	-.3636	-.3319	-.1034	.0835	-.0541	-.2077	-.2011	-.1324	-.0547
30.000			.4326	-.0073	-.2731	-.3267	-.3814	-.3433	.0433	.1213	-.0948	-.2735	-.1918	-.0813	.0006
60.000			.4148	-.0247	-.2819	-.3293	-.3942	-.2045	.1233	-.0916	-.3400	-.1292	-.0928	-.0625	-.0221
90.000		.8394	.4284	-.0105	-.2770	-.3304	-.3929	-.0358	.5076		-.4035	-.4049	-.1138	-.1806	-.0714
120.000			.4778	.0364	-.2526	-.3070	-.3729	-.0083	.0180	.2904	.1111	-.0428	-.0904	-.1339	-.2192
135.000								-.0097		.1368		-.1098		-.1750	
150.000			.5605	.0999	-.2031	-.2614	-.3441	-.1841	.1458	.2746	.0961	-.3469	-.1519	-.3315	-.2595
165.000				.1706	-.1507	-.2168	-.2968	-.2628	.1500	.3001	.3193	-.0598	-.0949	-.1511	-.2248
180.000	1.2180	1.0570	.7042	.2222	-.1095	-.1774	-.2580	-.1379	.1597	.2862	.4437	-.1984	-.0095	-.1972	-.2502
270.000		1.2120							.5956						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(4) = -4.200 BETAO (10) = 8.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0272	-.0448	.0080
30.000	-.0155	-.0063	.0072
60.000	-.0396	.0041	.1134
90.000	-.0820	.0152	
120.000	-.0742	.0234	.2383
135.000	-.0937	.0595	.1002
150.000	-.0932	.0432	-.0159
165.000	-.0990	.0548	.1916
180.000	-.1245	.0487	.2016

ALPHAO(4) = -4.160 BETAO (11) = 10.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1830	.8540	.4725	.0345	-.2525	-.3100	-.3758	-.3524	-.1148	.0190	-.0997	-.2193	-.1964	-.1273	-.0475
30.000			.3995	-.0319	-.2958	-.3440	-.3997	-.3642	.0167	.0676	-.1244	-.3004	-.1831	-.0496	-.0086
60.000			.3801	-.0496	-.3030	-.3479	-.4077	-.0961	.0225	-.0681	-.3026	-.1326	-.0571	-.0201	-.0272
90.000		.7875	.3866	-.0406	-.3023	-.3515	-.3342	-.0734	.4521		-.4239	-.4227	-.0539	-.0563	-.0936
120.000			.4352	.0009	-.2813	-.3354	-.3969	-.0418	-.0273	.2400	.0687	-.0730	-.0930	-.1465	-.2450
135.000								-.0228		.2263		-.1392		-.2037	
150.000			.5199	.0686	-.2318	-.2890	-.3690	-.0624	.1189	.2408	.0774	-.3865	-.1837	-.3506	-.3199
165.000				.1513	-.1701	-.2331	-.3136	-.2783	.1141	.2513	.3306	-.0810	-.0651	-.2130	-.2516
180.000	1.1830	1.0120	.6923	.2135	-.1159	-.1828	-.2627	-.1230	.1026	.2471	.4013	-.1557	-.0571	-.2760	-.3030
270.000		1.2490							.6010						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0592	-.0867	-.0055
30.000	-.0412	-.0243	.0046
60.000	-.0629	-.0118	.1286
90.000	-.1296	-.0211	
120.000	-.0904	.0020	.1956
135.000	-.1137	.0450	.0769
150.000	-.1188	.0299	-.0379
165.000	-.1260	.0204	.1665
180.000	-.1690	.0072	.1797

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(5) = -2.870 BETAO (1) = -10.040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1960	.8966	.5162	.0661	-.2328	-.2917	-.3579	-.3355	-.1586	.0575	-.1001	-.1997	-.1877	-.1726	-.0510
30.000			.6420	.1722	-.1458	-.2128	-.2875	-.2526	.0230	-.1589	-.4331	-.1260	-.1287	-.1348	-.0998
60.000			.7789	.2965	-.0505	-.1175	-.2109	-.1599	.2361	-.2110	-.4310	-.2551	-.1715	.0215	.0278
90.000		1.2610	.8703	.3848	.0176	-.0575	-.1472	.0444	.6154		-.5243	-.2817	-.2631	-.0470	-.0015
120.000			.8711	.3882	.0205	-.0555	-.1427	-.0757	.4076	-.0445	-.1118	.3075	.2538	.1263	-.0007
135.000								-.1113		-.0073		.2258		.1221	
150.000			.8110	.3288	-.0272	-.0980	-.1916	-.1433	.2051	.1841	.3141	.1513	.0431	-.0179	-.0293
165.000				.2559	-.0884	-.1559	-.2404	-.2064	.0635	.4346	.4928	.2240	.0012	-.0881	-.0629
180.000	1.1960	1.1030	.6612	.1891	-.1315	-.1941	-.2679	-.2457	.1151	.4570	.4970	-.1819	.0141	-.2553	-.1578
270.000		.7957							.5638						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0529	-.0570	-.0105
30.000	-.0547	-.0299	.0207
60.000	-.0007	.1063	.1505
90.000	-.0388	.0614	
120.000	-.0378	.1061	.7824
135.000	-.0004	.2665	.5386
150.000	.0057	.2995	.5914
165.000	.0046	.2942	.6252
180.000	.0160	.2448	.4498

ALPHAO(5) = -2.870 BETAO (2) = -8.030

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2290	.9301	.5325	.0809	-.2185	-.2739	-.3383	-.3129	-.1755	.1090	-.0545	-.1983	-.1818	-.1436	-.0565
30.000			.6314	.1614	-.1536	-.2180	-.2907	-.2584	.0484	-.1158	-.3283	-.1215	-.1045	-.1165	-.1093
60.000			.7389	.2579	-.0783	-.1450	-.2339	-.1779	.2391	-.2017	-.4434	-.2230	-.1957	.0033	.0151
90.000		1.2170	.8157	.3303	-.0240	-.0938	-.1829	-.1115	.6077		-.5137	-.2823	-.2833	-.0517	-.0329
120.000			.8286	.3450	-.0162	-.0879	-.1742	-.1073	.4063	-.0306	-.1219	.2517	.1989	.0960	-.0477
135.000								-.1399		.0639		.1468		.0994	
150.000			.7690	.3043	-.0459	-.1148	-.2068	-.1592	.2153	.3618	.2901	.1413	.0130	-.0530	-.0578
165.000				.2493	-.0891	-.1574	-.2395	-.2029	.0886	.4521	.5043	.1560	-.0270	-.1199	-.0898
180.000	1.2290	1.1150	.6783	.1975	-.1207	-.1849	-.2574	-.2389	.1085	.4424	.5366	-.2321	.0466	-.1919	-.1067
270.000		.8538							.6282						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(5) = -2.870 BETAO (2) = -8.030

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0393	-.0163	.0138
30.000	-.0565	-.0009	.0444
60.000	-.0258	.0900	.1438
90.000	-.0456	.0855	
120.000	-.0649	.1164	.6900
135.000	-.0266	.2561	.5044
150.000	-.0100	.2853	.5070
165.000	-.0123	.2803	.6178
180.000	.0057	.2448	.4570

ALPHAO(3) = -2.870 BETAO (3) = -5.960

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.2570	.9593	.5505	.0886	-.2145	-.2726	-.3377	-.3052	-.1816	.1470	-.0291	-.1867	-.1896	-.1181	-.0171
30.000			.6240	.1535	-.1671	-.2301	-.3003	-.2689	.0498	-.0543	-.2686	-.1559	-.0958	-.1062	-.0848
60.000			.7077	.2233	-.1098	-.1736	-.2599	-.2019	.2429	-.1943	-.4413	-.1989	-.2088	-.0291	.0059
90.000		1.1810	.7723	.2861	-.0624	-.1308	-.2164	-.1478	.6013		-.5007	-.2906	-.2810	-.0480	-.0462
120.000			.7884	.3021	-.0484	-.1181	-.2021	-.1381	.4080	-.0044	-.0880	.1818	.1521	.0721	-.0874
135.000								-.1650		.1596		.1058		.0824	
150.000			.7642	.2782	-.0647	-.1339	-.2240	-.1781	.2182	.4106	.2090	.0864	-.0110	-.0597	-.0882
165.000				.2365	-.0955	-.1614	-.2454	-.2111	.1449	.4634	.4965	.0977	-.0615	-.1057	-.1189
180.000	1.2570	1.1200	.6865	.2065	-.1184	-.1837	-.2588	-.2333	.1176	.3969	.5496	-.2622	.0940	-.1946	-.1433
270.000		.9049							.6195						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0433	-.0169	.0152
30.000	-.0446	-.0102	.0413
60.000	-.0152	.0800	.1140
90.000	-.0454	.1032	
120.000	-.0890	.0898	.6594
135.000	-.0520	.2322	.4851
150.000	-.0307	.2612	.4640
165.000	-.0227	.2541	.5845
180.000	.0030	.2260	.4376

ARC11-716 IA14 C1+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(5) = -2.860 BETAO (4) = -3.920

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2800	.9765	.5619	.0960	-.2072	-.2627	-.3290	-.2983	-.1501	.1763	.0025	-.1755	-.2091	-.0920	.0106
30.000			.6099	.1407	-.1759	-.2381	-.3057	-.2685	.0557	.0448	-.2228	-.2000	-.0994	-.0896	-.0497
60.000			.6706	.1906	-.1336	-.1974	-.2801	-.2214	.2490	-.1803	-.4222	-.1841	-.1452	-.0898	-.0012
90.000		1.1410	.7250	.2394	-.0973	-.1637	-.2442	-.1773	.5998		-.4843	-.3075	-.2564	-.0560	-.0579
120.000			.7474	.2594	-.0800	-.1461	-.2286	-.1660	.4176	.0298	-.0985	.1329	.0889	.0559	-.1122
135.000								-.1924		.2294		.0591		.0580	
150.000			.7466	.2531	-.0823	-.1486	-.2420	-.1898	.2189	.4350	.1668	.0149	- 0273	-.0775	-.1235
165.000				.2362	-.1007	-.1647	-.2492	-.2127	.1842	.4224	.4908	.0383	-.0355	-.1159	-.1095
180.000	1.2800	1.1270	.6982	.2091	-.1124	-.1816	-.2558	-.2172	.1332	.3645	.5389	-.2195	.0428	-.0626	-.1736
270.000		.9583							.6170						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0189	-.0172	-.0057
30.000	-.0449	-.0033	.0427
60.000	-.0163	.0662	.1027
90.000	-.0579	.1085	
120.000	-.1077	.0686	.6162
135.000	-.0613	.2036	.4455
150.000	-.0395	.2324	.4217
165.000	-.0222	.2430	.4920
180.000	-.0063	.2084	.4003

ALPHAO(5) = -2.860 BETAO (5) = -2.000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2890	.9862	.5654	.0988	-.2035	-.2597	-.3237	-.2940	-.1496	.1815	.0180	-.1684	-.2308	-.0740	.0175
30.000			.5919	.1232	-.1859	-.2449	-.3113	-.2745	.0543	.0962	-.1808	-.2077	-.1057	-.0770	-.0250
60.000			.6313	.1604	-.1594	-.2196	-.2988	-.2424	.2530	-.1641	-.3878	-.1628	-.0770	-.1298	-.0176
90.000		1.0950	.6727	.1984	-.1312	-.1944	-.2711	-.2084	.5984		-.4724	-.3180	-.2220	-.0650	-.0621
120.000			.7005	.2249	-.1089	-.1740	-.2534	-.2126	.4120	.0631	-.0827	.1092	.0422	.0354	-.1367
135.000								-.2150		.2621		-.0044		.0196	
150.000			.7173	.2310	-.1019	-.1664	-.2561	-.2065	.2175	.4278	.1340	-.0661	-.0491	-.1018	-.1808
165.000				.2267	-.1071	-.1706	-.2545	-.2192	.2065	.3879	.4593	-.0214	-.0153	-.1076	-.1240
180.000	1.2890	1.1250	.7003	.2163	-.1131	-.1804	-.2553	-.2131	.1524	.3587	.4939	-.1585	-.0220	-.0806	-.1192
270.000		1.0050							.6008						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(5) = -2.860 BETAO (5) = -2.000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0065	-.0052	.0322
30.000	-.0316	-.0092	.0328
60.000	-.0126	.0505	.1040
90.000	-.0652	.0971	
120.000	-.1055	.0650	.4903
135.000	-.0584	.1734	.3321
150.000	-.0620	.1894	.3023
165.000	-.0224	.1976	.3019
180.000	-.0185	.1646	.4125

ALPHAO(5) = -2.850 BETAO (6) = .020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2930	.9847	.5633	.1038	-.2008	-.2580	-.3238	-.2946	-.1569	.1794	.0219	-.1686	-.2362	-.0755	.0239
30.000			.5699	.1057	-.1992	-.2582	-.3232	-.2885	.0309	.1234	-.1460	-.2112	-.1220	-.0771	-.0015
60.000			.5925	.1225	-.1845	-.2432	-.3180	-.2684	.2414	-.1519	-.3758	-.1476	-.0587	-.1135	-.0444
90.000		1.0530	.6271	.1579	-.1625	-.2236	-.2951	-.2389	.5992		-.4752	-.3200	-.1678	-.0608	-.0696
120.000			.6805	.1918	-.1384	-.2021	-.2795	-.2497	.3400	.0984	-.0552	.1044	-.0090	.0164	-.1472
135.000								-.2363		.3164		-.0422		-.0219	
150.000			.6907	.2089	-.1208	-.1837	-.2713	-.2239	.2228	.3729	.1402	-.1266	-.0675	-.1355	-.1975
165.000				.2261	-.1127	-.1767	-.2605	-.2276	.2275	.3844	.3944	-.0260	-.0345	-.0929	-.1424
180.000	1.2930	1.1300	.7038	.2227	-.1099	-.1762	-.2571	-.2020	.1360	.3605	.4867	-.1492	-.0765	-.0714	-.1374
270.000		1.0900							.6016						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0030	-.0020	.0128
30.000	-.0256	-.0039	.0186
60.000	-.0121	.0408	.1036
90.000	-.0410	.0860	
120.000	-.0298	.0688	.3386
135.000	-.0203	.1448	.2200
150.000	-.0344	.1379	.1976
165.000	-.0169	.1598	.2710
180.000	-.0065	.1614	.2536

ARC11-715 IA14 C1+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHA0(5) = -2.850 BETA0 (7) = 2.020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2890	.9835	.5600	.0998	-.2023	-.2614	-.3229	-.2935	-.1453	.1666	.0125	-.1682	-.2273	-.0827	.0207
30.000			.5539	.0906	-.2064	-.2678	-.3321	-.2985	.0473	.1394	-.1109	-.2118	-.1386	-.0638	.0046
60.000			.5560	.0914	-.2082	-.2647	-.3332	-.2896	.2090	-.1269	-.3467	-.2447	-.0486	-.0689	-.0729
90.000		1.0070	.5804	.1119	-.1927	-.2500	-.3197	-.2555	.3066		-.4649	-.3282	-.1333	-.0790	-.0774
120.000			.6173	.1518	-.1675	-.2297	-.3052	-.2796	.2170	.1423	-.0409	.0723	-.0348	-.0068	-.1637
135.000								-.2607		.3338		-.0659		-.0559	
150.000			.6596	.1825	-.1440	-.2036	-.2922	-.2457	.2224	.3090	.0905	-.1940	-.0689	-.1688	-.2197
165.000				.2057	-.1232	-.1880	-.2700	-.2378	.2137	.3825	.3873	-.0353	-.0430	-.0641	-.1225
180.000	1.2890	1.1260	.7032	.2182	-.1129	-.1779	-.2602	-.1915	.1500	.3459	.4689	-.1378	-.0321	-.0817	-.1462
270.000		1.0970							.6059						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0081	-.0177	.0080
30.000	-.0126	-.0052	.0197
60.000	-.0179	.0329	.0986
90.000	-.0036	.0812	
120.000	-.0017	.0854	.2420
135.000	-.0227	.1182	.1459
150.000	-.0230	.1092	.1023
165.000	-.0165	.1385	.2753
180.000	-.0281	.1546	.2291

ALPHA0(5) = -2.770 BETA0 (8) = 4.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2750	.9712	.5561	.0935	-.2021	-.2649	-.3276	-.2993	-.1077	.1542	.0067	-.1657	-.2091	-.1056	.0072
30.000			.5219	.0643	-.2288	-.2861	-.3447	-.3107	.0734	.1063	-.0895	-.2187	-.1788	-.0654	.0046
60.000			.5114	.0548	-.2335	-.2854	-.3580	-.2948	.1580	-.0964	-.3182	-.1346	-.0569	-.0516	-.0521
90.000		.9520	.5283	.0698	-.2260	-.2804	-.3416	-.2774	.6091		-.4641	-.3360	-.1311	-.1075	-.0768
120.000			.5656	.1074	-.2000	-.2605	-.3268	-.2721	.1032	.1881	-.0015	.0322	-.0635	-.0338	-.1777
135.000								-.2819		.2502		-.0883		-.0932	
150.000			.6248	.1537	-.1684	-.2260	-.3109	-.2694	.1839	.2672	.1042	-.2676	-.0917	-.2055	-.2569
165.000				.1889	-.1357	-.2016	-.2834	-.2507	.2023	.3319	.3619	-.0430	-.0915	-.0383	-.1642
180.000	1.2750	1.1260	.6990	.2148	-.1163	-.1819	-.2642	-.1806	.1560	.3261	.4650	-.2043	-.0180	-.1361	-.1560
270.000		1.1440							.6040						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 OX+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(5) = -2.770 BETAO (8) = 4.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0235	-.0286	.0004
30.000	-.0110	-.0092	.0199
60.000	-.0381	.0178	.0823
90.000	-.0052	.0807	
120.000	-.0134	.0778	.1752
135.000	-.0354	.0857	.1034
150.000	-.0398	.0651	.0342
165.000	-.0217	.1150	.2085
180.000	-.0411	.1398	.2059

ALPHAO(5) = -2.790 BETAO (9) = 6.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2550	.9524	.5446	.0884	-.2082	-.2716	-.3364	-.3080	-.1098	.1366	-.0061	-.1788	-.1982	-.1431	-.0232
30.000			.4896	.0379	-.2445	-.2996	-.3566	-.3228	.0354	.1606	-.0909	-.2333	-.1806	-.0699	-.0055
60.000			.4678	.0190	-.2538	-.3032	-.3746	-.3202	.1353	-.0558	-.3009	-.1229	-.0755	-.0473	-.0275
90.000		.8980	.4786	.0324	-.2507	-.3032	-.3669	-.0647	.6177		-.4753	-.3578	-.1325	-.1620	-.0759
120.000			.5154	.0666	-.2276	-.2856	-.3540	.0009	.0246	.2432	.0755	-.0048	-.0880	-.0751	-.1853
135.000								-.0810		.1240		-.1013		-.1247	
150.000			.5827	.1194	-.1904	-.2478	-.3339	-.2681	.1527	.2916	.0651	-.3301	-.1309	-.2730	-.2481
165.000				.1657	-.1494	-.2170	-.2982	-.2633	.1740	.3134	.3300	-.0574	-.0928	-.0908	-.1837
180.000	1.2550	1.0930	.6830	.1993	-.1241	-.1880	-.2705	-.1732	.1574	.2992	.4439	-.2296	-.0332	-.*647	-.2004
270.000		1.1900							.6083						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0423	-.0257	.0186
30.000	-.0171	.0294	.0225
60.000	-.0314	.0513	.0952
90.000	-.0275	.0880	
120.000	-.0444	.0740	.2132
135.000	-.0624	.0732	.1036
150.000	-.0669	.0511	-.0039
165.000	-.0515	.0849	.2130
180.000	-.0667	.0883	.2492

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(5) = -2.790 BETAO (10) = 8.140

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2290	.9205	.5232	.0730	-.2224	-.2836	-.3508	-.3232	-.1231	.0856	-.0457	-.1911	-.1919	-.1741	-.0630
30.000			.4548	.0101	-.2657	-.3168	-.3721	-.3406	.0496	.1240	-.0973	-.2560	-.2036	-.0941	-.0082
60.000			.4285	-.0137	-.2745	-.3228	-.3903	-.3221	.1153	-.0324	-.2847	-.1068	-.0978	-.0523	-.0092
90.000		.8466	.4322	-.0071	-.2750	-.3243	-.3974	-.0462	.5769		-.4698	-.3873	-.1433	-.1982	-.0662
120.000			.4698	.0285	-.2582	-.3095	-.3739	-.0118	-.0039	.2682	.0759	-.0489	-.1132	-.1234	-.2000
135.000								-.0102		.0482		-.1276		-.1645	
150.000			.5400	.0840	-.2198	-.2732	-.3541	-.1107	.1285	.2800	.0730	-.3647	-.1611	-.3143	-.2390
165.000				.1423	-.1723	-.2359	-.3145	-.2806	.1356	.2782	.2971	-.0826	-.0983	-.1473	-.2080
180.000	1.2290	1.0250	.6728	.1926	-.1352	-.1993	-.2804	-.1625	.1372	.2661	.4171	-.2065	.0093	-.2080	-.2438
270.000		1.2250							.6107						

X/LT	.7460	.8330	.9290
PHI			
.000	-.0280	-.0414	.0038
30.000	-.0039	-.0071	.0154
60.000	-.0249	.0130	.1221
90.000	-.0540	.0466	
120.000	-.0598	.0376	.2684
135.000	-.0784	.0764	.1184
150.000	-.0818	.0624	.0019
165.000	-.0810	.0682	.2058
180.000	-.1057	.0690	.2201

ALPHAO(5) = -2.770 BETAO (11) = 10.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1940	.8869	.5066	.0608	-.2307	-.2904	-.3571	-.3335	-.1552	.0227	-.0996	-.1928	-.1936	-.1750	-.0501
30.000			.4212	-.0139	-.2811	-.3330	-.3889	-.3573	.0262	.0743	-.1137	-.2861	-.1848	-.0494	-.0020
60.000			.3933	-.0417	-.2950	-.3393	-.4050	-.1020	.0477	-.0180	-.2562	-.1050	-.0880	-.0175	-.0158
90.000		.7967	.3917	-.0333	-.2956	-.3426	-.3992	-.0629	.5083		-.4694	-.4093	-.1140	-.0869	-.0861
120.000			.4293	-.0086	-.2798	-.3328	-.3955	-.0413	-.0347	.2474	.0398	-.0835	-.1292	-.1337	-.2313
135.000								-.0281		.0730		-.1547		-.1885	
150.000			.5024	.0532	-.2389	-.2940	-.3765	-.0487	.1069	.2505	.0690	-.4035	-.1920	-.3289	-.2987
165.000				.1260	-.1859	-.2495	-.3296	-.2966	.1035	.2400	.2997	-.0944	-.0787	-.2019	-.2332
180.000	1.1940	.9817	.6614	.1858	-.1371	-.2022	-.2839	-.1449	.0980	.2224	.3607	-.1601	-.0654	-.2736	-.2958
270.000		1.2610							.6172						

X/LT	.7460	.8530	.9280
PHI			

CALCULATION OF T12+S.2N25+ATIL EXTERNAL TAN (RB1T33)

ALPHA(5) = -2.770 BETAO (1) = 10.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0544	-.0767	-.0092
30.000	-.0345	-.0276	.0070
60.000	-.0468	-.0137	.1340
90.000	-.0956	.0167	
120.000	-.0750	.0220	.2228
135.000	-.0991	.0661	.0949
150.000	-.1041	.0498	-.0236
165.000	-.1092	.0355	.1877
180.000	-.1530	.0352	.2006

ALPHA(6) = -.760 BETAO (1) = -10.520

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1860	.9265	.5530	.0978	-.2086	-.2670	-.3350	-.3186	-.1430	.0151	-.0970	-.1550	-.1742	-.1813	-.0706
30.000			.6961	.2201	-.1062	-.1726	-.2511	-.2229	.0628	-.1211	-.4007	-.1091	-.1162	-.1162	-.0830
60.000			.8286	.3460	-.0111	-.0822	-.1794	-.1150	.2987	-.1635	-.3314	-.1987	-.1783	.0055	.0481
90.000		1.2780	.8956	.4040	.0359	-.0383	-.1336	.1291	.6249		-.4438	-.3904	-.2157	-.0899	.0101
120.000			.8597	.3745	.0098	-.0627	-.1553	-.0876	.3505	-.1001	-.1501	.1998	.3070	.1719	.0548
135.000								-.1303		-.0652		.1427		.1579	
150.000			.7683	.2937	-.0589	-.1261	-.2200	-.1695	.1551	-.0332	.2856	.0500	.1129	.0054	.0010
165.000				.2112	-.1260	-.1859	-.2773	-.2408	.0272	.3807	.4598	.2021	-.0249	-.0634	-.0280
180.000	1.1860	1.0520	.6052	.1451	-.1720	-.2308	-.3038	-.2710	.0523	.4305	.4751	-.1771	.0604	-.2254	-.1414
270.000		.7795							.6636						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0654	-.0725	-.0364
30.000	-.0447	-.0162	.0063
60.000	.0316	.1365	.1575
90.000	.0028	.0993	
120.000	.0010	.1089	.8341
135.000	.0477	.3121	.5856
150.000	.0516	.3426	.6320
165.000	.0516	.3331	.6421
180.000	.0455	.2750	.4607

ARC11-716 IA14 01+T13+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHA0(6) = -.730 BETA0 (2) = -8.420

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2250	.9670	.5733	.1176	-.1889	-.2491	-.3173	-.2992	-.1606	.1090	-.0549	-.1570	-.1690	-.1885	-.0793
30.000			.6871	.2082	-.1129	-.1790	-.2537	-.2308	.0745	-.0804	-.3004	-.1009	-.0953	-.1094	-.1078
60.000			.7882	.3017	-.0431	-.1113	-.2064	-.1377	.3035	-.1447	-.3487	-.1781	-.1877	-.0271	.0266
90.000		1.2380	.8392	.3523	-.0063	-.0781	-.1714	-.0929	.6166		-.4529	-.4046	-.2499	-.0734	-.0148
120.000			.8128	.3304	-.0242	-.0950	-.1857	-.1176	.3495	-.0862	-.1194	.1051	.2378	.1373	-.0129
135.000								-.1600		-.0400		.0083		.1344	
150.000			.7502	.2589	-.0742	-.1396	-.2329	-.1981	.1650	.1724	.2833	.0197	.0533	-.0177	-.0396
165.000				.2034	-.1230	-.1889	-.2732	-.2401	.0301	.4224	.4616	.1585	-.0672	-.1022	-.0620
180.000	1.2250	1.0620	.6165	.1588	-.1570	-.2169	-.2939	-.2695	.0451	.4387	.4958	-.2165	-.1003	-.1869	-.1046
270.000		.8375							.6611						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0525	-.0154	-.0028
30.000	-.0436	.0158	.0370
60.000	-.0026	.1214	.1514
90.000	-.0268	.0969	
120.000	-.0852	.1421	.7374
135.000	.0155	.2976	.5353
150.000	.0322	.3234	.5518
165.000	.0415	.3226	.6288
180.000	.0468	.2799	.4579

ALPHA0(6) = -.730 BETA0 (3) = -8.290

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2580	1.0010	.5950	.1317	-.1809	-.2412	-.3091	-.2845	-.2942	.1560	-.0156	-.1621	-.1675	-.1413	-.0313
30.000			.6789	.1990	-.1263	-.1916	-.2662	-.2405	.0749	-.0228	-.2372	-.1274	-.0788	-.0980	-.0819
60.000			.7517	.2617	-.0741	-.1411	-.2310	-.1653	.3083	-.1308	-.3538	-.1557	-.1212	-.0788	.0078
90.000		1.1970	.7875	.3008	-.0481	-.1175	-.2047	-.1340	.6112		-.4591	-.4154	-.2724	-.0598	-.0414
120.000			.7696	.2841	-.0593	-.1274	-.2116	-.1496	.3519	-.0733	-.1087	.0104	.1818	.1014	-.0523
135.000								-.1849		-.0381		-.0531		.1040	
150.000			.7232	.2404	-.0925	-.1583	-.2479	-.2050	.1660	.3171	.2632	-.0002	.0123	-.0374	-.0685
165.000				.1949	-.1295	-.1921	-.2750	-.2418	.0610	.4253	.4722	.1215	-.1667	-.1236	-.0853
180.000	1.2580	1.0730	.6327	.1525	-.1544	-.2168	-.2893	-.2585	.0849	.3848	.5217	-.2441	-.2308	-.1691	-.0949
270.000		.8964							.6465						

X/LT	.7460	.8530	.9280
PHI			

...PRESSURE DATA - TA14 - V1...

...SCALE TA14 DS+T12+S12N25+AT1C EXTERNAL TANK (RB1T33

ALPHA(6) = -.730 BETA(3) = -6.290

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0417	-.0085	.0134
30.000	-.0433	.0075	.0449
60.000	.0006	.0880	.1301
90.000	-.0265	.1004	
120.000	-.0902	.1449	.0640
135.000	-.0153	.2783	.4977
150.000	.3091	.2974	.5091
165.000	.0171	.2921	.6086
180.000	.0457	.2566	.4497

ALPHA(6) = -.710 BETA(4) = -4.140

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2760	1.0220	.6104	.1409	-.1724	-.2306	-.3315	-.2775	-.2006	.1926	.0167	-.1543	-.1825	-.1122	-.0108
30.000			.6621	.1874	-.1351	-.1998	-.2713	-.2455	.0795	.0642	-.1878	-.1577	-.0899	-.0808	-.0317
60.000			.7099	.2273	-.1033	-.1652	-.2545	-.1913	.3107	-.1212	-.3431	-.1572	-.0587	-.1104	-.0193
90.000		1.1540	.7391	.2530	-.0836	-.1504	-.2358	-.1673	.6077		-.4550	-.4224	-.2995	-.0849	-.0594
120.000			.7283	.2517	-.0888	-.1555	-.2384	-.1765	.3603	-.0367	-.0820	-.0521	.1162	.0745	-.0748
135.000								-.2038		.0987		-.0652		.0914	
150.000			.7020	.2231	-.1074	-.1721	-.2619	-.2149	.1886	.3765	.1894	-.0204	-.0614	-.0421	-.0867
165.000				.1983	-.1323	-.1946	-.2757	-.2410	.1330	.3997	.4559	.0655	-.2051	-.1000	-.0769
180.000	1.2760	1.0750	.6464	.1683	-.1462	-.2102	-.2852	-.2451	.0992	.3149	.5136	-.2397	-.2575	-.0456	-.1316
270.000		.9499							.6423						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0119	-.0130	-.0045
30.000	-.0326	.0088	.0324
60.000	.0054	.0739	.1031
90.000	-.0307	.1097	
120.000	-.0684	.1115	.6245
135.000	-.0334	.2476	.4729
150.000	-.0149	.2709	.4768
165.000	-.0010	.2714	.5465
180.000	.0229	.2410	.4099

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(6) = -.700 BETAO (5) = -2.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.2900	1.0350	.6196	.1449	-.1617	-.2219	-.2918	-.2661	-.1894	.2153	.0394	-.1485	-.2027	-.0917	.0083
30.000			.5456	.1716	-.1451	-.2079	-.2765	-.2473	.0414	.1159	-.1454	-.1696	-.1053	-.0730	-.0137
60.000			.5736	.1959	-.1278	-.1895	-.2732	-.2104	.3164	-.0989	-.3114	-.1653	-.0369	-.0650	-.0570
90.000		1.1080	.6873	.2120	-.1154	-.1799	-.2603	-.1937	.6088		-.4483	-.4317	-.3107	-.1039	-.0678
120.000			.6860	.2139	-.1156	-.1794	-.2592	-.2005	.3738	-.0093	-.0690	-.1151	.0507	.0536	-.0979
135.000								-.2237		.1875		-.1071		.0607	
150.000			.5776	.2131	-.1218	-.1862	-.2761	-.2255	.2067	.3948	.1392	-.0897	-.1058	-.0532	-.1191
165.000				.1917	-.1348	-.1965	-.2774	-.2430	.1652	.3591	.4481	.0032	-.1520	-.0652	-.0818
180.000	1.2900	1.0770	.6488	.1727	-.1405	-.2012	-.2809	-.2277	.1203	.2961	.4943	-.1629	-.2068	-.0517	-.0960
270.000		1.0020							.6297						

X/LT	.7480	.8530	.9280
PHI			
.000	.0061	.0078	.0185
30.000	-.0196	.0128	.0177
60.000	-.0019	.0673	.0953
90.000	-.0340	.1088	
120.000	-.0777	.0582	.5469
135.000	-.0350	.2189	.4006
150.000	-.0365	.2437	.3853
165.000	.0003	.2456	.5168
180.000	.0080	.2098	.4250

ALPHAO(6) = -.700 BETAO (6) = .030

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.2970	1.0380	.6182	.1477	-.1599	-.2231	-.2924	-.2669	-.1837	.2106	.0391	-.1355	-.2075	-.0756	.0865
30.000			.6219	.1485	-.1599	-.2225	-.2919	-.2640	.0523	.1574	-.1136	-.1681	-.1254	-.0655	.0075
60.000			.6274	.1485	-.1597	-.2166	-.2999	-.2386	.3073	-.0872	-.2832	-.1875	-.0318	-.0324	-.0565
90.000		1.0590	.6366	.1648	-.1527	-.2135	-.2894	-.2278	.6123		-.4549	-.4206	-.2656	-.1049	-.0810
120.000			.6421	.1669	-.1483	-.2080	-.2859	-.2305	.3787	.0291	-.0406	-.1350	-.0026	.0269	-.1167
135.000								-.2482		.2319		-.1558		.0123	
150.000			.6492	.1711	-.1436	-.2039	-.2915	-.2423	.1988	.3874	.0902	-.1569	-.1265	-.0810	-.1067
165.000				.1776	-.1421	-.2021	-.2959	-.2505	.1972	.3515	.3929	-.0372	-.1715	-.0657	-.1211
180.000	1.2970	1.0790	.6516	.1761	-.1405	-.2013	-.2836	-.2219	.1195	.3342	.4558	-.1395	-.0937	-.0463	-.1144
270.000		1.0540							.6205						

X/LT	.7480	.8530	.9280
PHI			

ARC11-FIG 14A 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHA0(6) = -.700 BETA0 (6) = .030

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0096	.0041	.0194
30.000	-.0010	.0125	.0255
60.000	-.0214	.0461	.0863
90.000	-.0047	.0855	
120.000	-.0065	.0937	.3957
135.000	.0022	.1789	.2577
150.000	-.0135	.1744	.2289
165.000	.0152	.1895	.2921
180.000	.0242	.1895	.2614

ALPHA0(6) = -.700 BETA0 (7) = 8.180

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2920	1.0710	.6131	.1418	-.1713	-.2327	-.3001	-.2700	-.1788	.1950	.0284	-.1460	-.2013	-.0957	.0105
30.000			.5933	.1210	-.1843	-.2465	-.3129	-.2840	.0708	.1296	-.0775	-.1770	-.1540	-.0882	.0007
60.000			.5817	.1191	-.1950	-.2484	-.3299	-.2752	.2463	-.0647	-.2638	-.2085	-.0426	-.0394	-.0342
90.000		1.0100	.5827	.1188	-.1929	-.2512	-.3103	-.2655	.6173		-.4615	-.3947	-.2344	-.1265	-.0932
120.000			.5943	.1270	-.1825	-.2455	-.3180	-.2681	.3370	.0664	-.0303	-.1051	-.0452	-.0019	-.1331
135.000								-.2756		.2788		-.1703		-.0360	
150.000			.6178	.1439	-.1703	-.2291	-.3129	-.2650	.1789	.3374	.1140	-.2406	-.1321	-.1281	-.1988
165.000				.1616	-.1573	-.2190	-.2989	-.2642	.1840	.3244	.3606	-.0383	-.1235	-.0427	-.1044
180.000	1.2920	1.0740	.6473	.1686	-.1487	-.2153	-.2907	-.2172	.1364	.3015	.4309	-.1179	-.1019	-.0671	-.1273
270.000		1.1030							.6162						

X/LT	.7460	.8530	.9280
PHI			
.000	.0023	-.0100	.0272
30.000	.0018	.0012	.0336
60.000	-.0155	.0323	.0657
90.000	.0139	.0620	
120.000	.0144	.1100	.2664
135.000	.0044	.1412	.1619
150.000	.0012	.1306	.1179
165.000	.0071	.1651	.2754
180.000	-.0012	.1890	.2319

ARC11-715 IA14 01+T12+S12:25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(6) = -.710 BETAO (8) = 4.270

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2790	1.0190	.6045	.1365	-.1731	-.2352	-.3053	-.2775	-.1501	.1855	.0223	-.1441	-.1905	-.1174	-.0041
30.000			.5581	.0922	-.2004	-.2619	-.3266	-.2937	.0739	.1852	-.0793	-.1934	-.1742	-.0646	-.0078
60.000			.5338	.0719	-.2211	-.2716	-.3498	-.3014	.1479	-.0206	-.2487	-.1937	-.0561	-.0478	-.0264
90.000		.9559	.5301	.0727	-.2227	-.2783	-.3175	-.2356	.6216		-.4651	-.3606	-.2433	-.1209	-.0946
120.000			.5465	.0877	-.2094	-.2689	-.3387	-.2929	.2147	.1028	-.0054	-.0804	-.0753	-.0291	-.1505
135.000								-.2971		.2649		-.1782		-.0786	
150.000			.5850	.1144	-.1918	-.2474	-.3310	-.2873	.1538	.2530	.0926	-.3046	-.1473	-.1651	-.2266
165.000				.1534	-.1663	-.2302	-.3104	-.2764	.1720	.3122	.3390	-.0513	-.1257	-.0352	-.1374
180.000	1.2790	1.0750	.6444	.1720	-.1500	-.2123	-.2947	-.2094	.1311	.2860	.4336	-.1910	-.0329	-.1177	-.1382
270.000		1.1510							.6165						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0118	-.0220	.0002
30.000	.0012	.0018	.0325
60.000	-.0062	.0384	.0848
90.000	.0105	.0580	
120.000	.0102	.1044	.1803
135.000	-.0126	.1079	.1206
150.000	-.0180	.0856	.0508
165.000	.0018	.1352	.2238
180.000	-.0155	.1569	.2315

ALPHAO(6) = -.730 BETAO (9) = 6.350

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2560	.9989	.5917	.1280	-.1797	-.2469	-.3158	-.2898	-.1392	.1500	-.0004	-.1551	-.1775	-.1440	-.0328
30.000			.5229	.0642	-.2301	-.2879	-.3484	-.3046	.0361	.1798	-.0653	-.2094	-.1904	-.0827	-.0135
60.000			.4871	.0396	-.2513	-.3014	-.3714	-.3227	.0788	-.0002	-.2266	-.1783	-.0719	-.0463	-.0219
90.000		.9001	.4758	.0297	-.2551	-.3070	-.3493	-.1615	.6234		-.4655	-.3145	-.2314	-.1163	-.0823
120.000			.4960	.0488	-.2422	-.2996	-.3640	-.2062	.0977	.1382	-.0056	-.0848	-.1049	-.0533	-.1540
135.000								-.2780		.2245		-.1825		-.1176	
150.000			.5446	.0817	-.2182	-.2740	-.3543	-.3059	.1322	.2180	.0527	-.3626	-.1749	-.2475	-.2069
165.000				.1254	-.1875	-.2505	-.3248	-.2912	.1460	.2868	.3085	-.0737	-.1067	-.0899	-.1624
180.000	1.2560	1.0410	.6291	.1527	-.1637	-.2249	-.3019	-.2052	.1290	.2674	.4073	-.2248	-.0370	-.1550	-.1795
270.000		1.1990							.6171						

X/LT	.7460	.8530	.9280
PHI			

ARC1-715 IA14 D+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(6) = -.730 BETAO (9) = 6.350

SECTION 1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0333	-.0170	.0083
30.000	-.0056	.0330	.0230
60.000	-.0111	.0543	.0990
90.000	-.0001	.0859	
120.000	-.0201	.0977	.2173
135.000	-.0357	.0964	.1216
150.000	-.0434	.0725	.0125
165.000	-.0278	.1019	.2255
180.000	-.0442	.1106	.2620

ALPHAO(6) = -.730 BETAO (10) = 8.130

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2290	.9697	.5725	.1128	-.1891	-.2561	-.3232	-.2951	-.1174	.0993	-.0386	-.1616	-.1734	-.1729	-.0652
30.000			.4914	.0407	-.2455	-.3002	-.3614	-.3279	.0671	.1313	-.0793	-.2346	-.2044	-.0909	-.0140
60.000			.4501	.0024	-.2666	-.3166	-.3863	-.3256	.0541	.0105	-.2163	-.1783	-.0904	-.0470	-.0015
90.000		.8525	.4361	.0026	-.2681	-.3232	-.3811	-.1773	.6154		-.4510	-.3030	-.2246	-.1087	-.0589
120.000			.4582	.0166	-.2637	-.3171	-.3777	-.0577	.0029	.1580	-.0056	-.1027	-.1324	-.0757	-.1650
135.000								-.0718		.1300		-.1944		-.1482	
150.000			.5108	.0539	-.2391	-.2899	-.3673	-.1919	.1167	.2276	.0525	-.3912	-.1950	-.2785	-.2013
165.000				.1043	-.2017	-.2627	-.3342	-.3024	.1259	.2583	.2776	-.1103	-.0791	-.1553	-.1757
180.000	1.2290	.9744	.6210	.1474	-.1737	-.2335	-.3076	-.1948	.1159	.2359	.3809	-.2189	-.0754	-.2401	-.2210
270.000		1.2300							.6217						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0283	-.0231	-.0064
30.000	.0089	.0022	.0129
60.000	-.0017	.0197	.1056
90.000	-.0067	.0763	
120.000	-.0288	.0659	.3094
135.000	-.0474	.1001	.1476
150.000	-.0512	.0826	.0289
165.000	-.0496	.0865	.2290
180.000	-.0738	.1022	.2493

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(6) = -.790 BETAO (11) = 10.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1990	.9329	.5525	.0972	-.2004	-.2633	-.3326	-.3126	-.1367	.0286	-.0887	-.1583	-.1776	-.1939	-.0427
30.000			.4525	.0126	-.2645	-.3200	-.3796	-.3535	.0396	.0677	-.1396	-.2618	-.1886	-.0502	-.0022
60.000			.4079	-.0282	-.2900	-.3382	-.4038	-.3388	.0767	.0314	-.1974	-.1665	-.0780	-.0098	-.0101
90.000		.8032	.3957	-.0311	-.2920	-.3413	-.4030	-.0958	.6310		-.4402	-.2922	-.1733	-.1361	-.0740
120.000			.4176	-.0158	-.2851	-.3359	-.3994	-.0567	-.0651	.2045	-.0139	-.0814	-.1562	-.1074	-.2016
135.000								-.0457		.0124		-.2032		-.1550	
150.000			.4779	.0291	-.2571	-.3090	-.3902	-.0463	.0891	.2635	.0547	-.4293	-.1942	-.2623	-.2842
165.000				.0885	-.2122	-.2743	-.3548	-.3231	.0959	.2244	.2578	-.1239	-.0544	-.1913	-.1950
180.000	1.1990	.9246	.6154	.1386	-.1711	-.2545	-.3142	-.1993	.1011	.1980	.3249	-.1791	-.0927	-.2697	-.2834
270.000		1.2650							.6270						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0532	-.0623	-.0185
30.000	-.0287	-.0211	.0075
60.000	-.0403	-.0116	.1227
90.000	-.0464	.0536	
120.000	-.0467	.0497	.2737
135.000	-.0737	.0900	.1243
150.000	-.0768	.0719	.0012
165.000	-.0812	.0578	.2171
180.000	-.1229	.0761	.2242

ALPHAO(7) = 2.010 BETAO (1) = -10.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1930	.9976	.6202	.1560	-.1631	-.2239	-.2959	-.2754	-.0939	-.0088	-.0595	-.1230	-.1480	-.1682	-.0783
30.000			.7639	.2859	-.0586	-.1302	-.2098	-.1840	.1222	-.0567	-.3301	-.0888	-.0663	-.0860	-.0825
60.000			.8655	.3800	.0158	-.0572	-.1571	-.0814	.3755	-.0956	-.2589	-.1220	-.0721	-.0529	.0224
90.000		1.2670	.8805	.3948	.0274	-.0473	-.1404	.0667	.6208		-.3599	-.3886	-.2653	-.2180	-.0311
120.000			.8023	.3267	-.0305	-.1013	-.1906	-.1147	.2722	-.1740	-.3104	-.2165	.2517	.2233	.0954
135.000								-.1824		-.1345		.0232		.1886	
150.000			.6955	.2233	-.1091	-.1745	-.2647	-.2166	.0812	-.1159	.2695	-.0551	.0157	.0396	.0248
165.000				.1474	-.1739	-.2360	-.3180	-.2821	-.0332	.3236	.4152	.1725	-.2027	-.0455	-.0038
180.000	1.1930	.9913	.5435	.0941	-.2130	-.2685	-.3376	-.2967	.0188	.4028	.4673	-.1896	-.3530	-.1412	-.0714
270.000		.7907							.6706						

X/LT	.7460	.8530	.9280
PHI			

ARC1S-7)6 I-14 C1*T12*S12N25*AT1D EXTERNAL TANK (RB1T33)

ALPHAO(7) = 8.010 BETAO (1) = -10.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0648	-.0322	-.0447
30.000	-.0168	.0232	.0195
60.000	.0475	.1595	.1616
90.000	.0113	.0908	
120.000	.0399	.1692	.8739
135.000	.0894	.3673	.5288
150.000	.0968	.3832	.6683
165.000	.1072	.3714	.6581
180.000	.0908	.3055	.4702

ALPHAO(7) = 2.000 BETAO (2) = -8.040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2800	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2290	1.0360	.6434	.1735	-.1446	-.2099	-.2324	-.2562	-.1580	.1151	-.0206	-.1171	-.1400	-.1375	-.0981
30.000			.7537	.2698	-.0719	-.1412	-.2193	-.1898	.1274	-.0169	-.2473	-.0805	-.0559	-.0849	-.0732
60.000			.8252	.3380	-.0191	-.0879	-.1838	-.1078	.3776	-.0818	-.2638	-.1219	-.0385	-.0612	-.0022
90.000		1.2300	.8305	.3398	-.0171	-.0869	-.1752	-.0960	.6114		-.3803	-.3845	-.2818	-.2057	-.0494
120.000			.7641	.2877	-.0611	-.1332	-.2170	-.1494	.2684	-.1667	-.2712	-.2279	.1967	.1737	.0498
135.000								-.2001		-.1073		-.0608		.1552	
150.000			.6811	.2053	-.1244	-.1888	-.2747	-.2288	.1015	.0201	.2706	-.1011	-.0409	.0160	-.0021
165.000				.1488	-.1726	-.2357	-.3139	-.2780	-.0028	.3741	.4381	.1340	-.2041	-.0761	-.0133
180.000	1.2290	1.0030	.5599	.1027	-.2020	-.2598	-.3296	-.2861	.0703	.3918	.4725	-.2190	-.2960	-.1317	-.0599
270.000		.8460							.6631						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0314	.0036	-.0164
30.000	-.0379	.0543	.0411
60.000	.0198	.1387	.1538
90.000	-.0086	.0728	
120.000	.0170	.1759	.7765
135.000	.0660	.3471	.5681
150.000	.0812	.3641	.6206
165.000	.0974	.3591	.6426
180.000	.0990	.3066	.4590

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(7) = 2.050 BETAO (3) = -6.040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2560	1.0660	.6643	.1882	-.1368	-.2027	-.2750	-.2492	-.1922	.1815	.0123	-.1203	-.1418	-.1117	-.0559
30.000			.7441	.2540	-.0824	-.1524	-.2294	-.2035	.1338	.0389	-.1795	-.0941	-.0539	-.0704	-.0546
60.000			.7878	.2966	-.0499	-.1188	-.2129	-.1415	.3799	-.0650	-.2597	-.1151	-.0216	-.0353	-.0410
90.000		1.1890	.7805	.2919	-.0545	-.1240	-.2103	-.1481	.6035		-.3965	-.3472	-.2928	-.2010	-.0751
120.000			.7233	.2420	-.0942	-.1617	-.2450	-.1815	.2641	-.1603	-.2758	-.2516	.1440	.1299	.0110
135.000								-.2204		-.0364		-.1571		.1184	
150.000			.6558	.1809	-.1422	-.2040	-.2884	-.2434	.0995	.1612	.2734	-.1287	-.1056	.0048	-.0242
165.000				.1449	-.1794	-.2424	-.3151	-.2798	.0782	.3833	.4270	.1068	-.2613	-.0630	-.0360
180.000	1.2560	1.0140	.0658	.1072	-.2001	-.2594	-.3284	-.2834	.0670	.3351	.4874	-.2337	-.3157	-.0685	-.0657
270.000		.8975							.6464						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0274	-.0074	.0116
30.000	-.0276	.0265	.0299
60.000	.0137	.0978	.1276
90.000	-.0145	.0532	
120.000	-.0108	.1746	.7065
135.000	.0363	.3277	.5315
150.000	.0508	.3408	.5827
165.000	.0683	.3366	.5915
180.000	.0819	.2945	.4387

ALPHAO(7) = 1.920 BETAO (4) = -3.990

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2750	1.0860	.5745	.1934	-.1296	-.1943	-.2689	-.2428	-.1744	.2212	.0454	-.1206	-.1530	-.0967	-.0279
30.000			.7208	.2331	-.0996	-.1681	-.2407	-.2131	.1221	.1068	-.1542	-.1154	-.0701	-.0685	-.0381
60.000			.7423	.2508	-.0845	-.1502	-.2373	-.1747	.3779	-.0521	-.2453	-.1322	-.0116	-.0256	-.0310
90.000		1.1470	.7306	.2461	-.0906	-.1597	-.2405	-.1786	.6001		-.4327	-.2760	-.2446	-.1766	-.1004
120.000			.6852	.2089	-.1225	-.1874	-.2650	-.2050	.2762	-.1124	-.2498	-.2739	.0874	.0881	-.0224
135.000								-.2334		.0188		-.2020		.0831	
150.000			.6418	.1721	-.1540	-.2133	-.2958	-.2499	.1378	.2563	.2449	-.1206	-.1733	-.0038	-.0488
165.000				.1429	-.1804	-.2394	-.3127	-.2770	.1360	.3584	.4282	.0647	-.3086	-.0158	-.0349
180.000	1.2780	1.0120	.5758	.1106	-.1925	-.2510	-.3187	-.2548	.0649	.2696	.4886	-.2128	-.3286	-.0279	-.0512
270.000		.9538							.6458						

X/LT	.7460	.8530	.9280
PHI			

ARC1 -716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHA0(7) = 1.920 BETA0 (4) = -3.990

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0025	.0075	.0224
30.000	-.0108	.0326	.0292
60.000	.0006	.0815	.1069
90.000	-.0279	.0611	
120.000	-.0362	.1440	.6289
135.000	.0084	.2902	.4812
150.000	.0255	.3064	.5112
165.000	.0522	.3151	.5544
180.000	.0621	.2693	.4199

ALPHA0(7) = 1.920 BETA0 (5) = -2.020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2920	1.0970	.6792	.1995	-.1262	-.1920	-.2648	-.2376	-.1719	.2359	.0635	-.1139	-.1608	-.0880	-.0077
30.000			.6995	.2151	-.1144	-.1820	-.2553	-.2261	.0869	.1506	-.0903	-.1203	-.1109	-.0646	-.0208
60.000			.6997	.2166	-.1147	-.1771	-.2624	-.2039	.3763	-.0345	-.2225	-.1771	-.0177	-.0204	-.0129
90.000		1.1030	.6787	.2044	-.1267	-.1917	-.2679	-.2091	.5978		-.4615	-.1858	-.0330	-.0650	-.0734
120.000			.6481	.1764	-.1493	-.2112	-.2851	-.2283	.2910	-.0805	-.2004	-.2602	.0466	.0708	-.0444
135.000								-.2458		.0724		-.1829		.0679	
150.000			.6203	.1488	-.1678	-.2276	-.3075	-.2552	.2079	.3207	.1667	-.1179	-.1759	-.0106	-.0748
165.000				.1296	-.1819	-.2410	-.3151	-.2789	.1252	.3038	.4086	.0173	-.2277	-.0150	-.0486
180.000	1.2920	1.0150	.5839	.1108	-.1872	-.2489	-.3185	-.2330	.0945	.2484	.4552	-.1489	-.2677	-.0182	-.0727
270.000		1.0060							.6349						

X/LT	.7460	.8530	.9280
PHI			
.000	.0107	.0166	.0379
30.000	.0018	.0299	.0437
60.000	-.0003	.0740	.0956
90.000	-.0266	.1014	
120.000	-.0494	.1432	.5219
135.000	-.0104	.2587	.4046
150.000	-.0054	.2725	.4062
165.000	.0385	.2722	.5062
180.000	.0398	.2351	.4145

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(7) = 1.920 BETAO (6) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2970	1.1010	.6817	.2037	-.1248	-.1888	-.2633	-.2364	-.1602	.2411	.0631	-.1170	-.1628	-.0859	.0001
30.000			.6749	.1964	-.1305	-.1960	-.2669	-.2403	.0909	.1492	-.0566	-.1291	-.1404	-.0677	-.0056
60.000			.6554	.1808	-.1438	-.2047	-.2904	-.2437	.3156	-.0145	-.2005	-.1887	-.0327	-.0319	-.0221
90.000		1.0550	.6307	.1571	-.1599	-.2214	-.2935	-.2395	.5993		-.4791	-.1670	-.0329	-.0643	-.0831
120.000			.6052	.1371	-.1745	-.2349	-.3066	-.2499	.3171	-.0553	-.1529	-.2435	.0009	.0446	-.0640
135.000								-.2653		.1466		-.2184		.0475	
150.000			.5956	.1257	-.1817	-.2416	-.3217	-.2687	.1805	.3432	.0839	-.1776	-.1979	-.0200	-.1196
165.000				.1248	-.1878	-.2441	-.3186	-.2815	.1537	.2927	.3749	-.0474	-.2527	-.0137	-.0763
180.000	1.2970	1.0130	.5870	.1186	-.1860	-.2472	-.3178	-.2484	.0928	.2718	.4140	-.0993	-.2105	-.0038	-.0645
270.000		1.0540							.6219						

X/LT	.7460	.8530	.9280
PHI			
.000	.0139	.0145	.0249
30.000	.0089	.0255	.0537
60.000	.0011	.0589	.0991
90.000	-.0030	.0929	
120.000	.0147	.1245	.4126
135.000	.0227	.2117	.2799
150.000	.0056	.2083	.2593
165.000	.0430	.2209	.3060
180.000	.0534	.2183	.2796

ALPHAO(7) = 1.920 BETAO (7) = 2.050

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2900	1.0930	.6751	.1993	-.1304	-.1947	-.2679	-.2392	-.1691	.2455	.0574	-.1172	-.1625	-.0924	-.0046
30.000			.6436	.1689	-.1538	-.2180	-.2856	-.2577	.0811	.1854	-.0542	-.1496	-.1551	-.0816	-.0155
60.000			.6103	.1335	-.1762	-.2350	-.3165	-.2760	.1382	.0100	-.1873	-.1817	-.0421	-.0408	-.0284
90.000		1.0060	.5825	.1125	-.1959	-.2548	-.3228	-.2684	.6038		-.5014	-.1477	-.0479	-.0652	-.0835
120.000			.5651	.1109	-.2049	-.2605	-.3269	-.2760	.2953	-.0213	-.1171	-.1885	-.0390	.0085	-.0869
135.000								-.2833		.2005		-.2296		.0043	
150.000			.5687	.1098	-.2008	-.2587	-.3366	-.2851	.1440	.3307	.1013	-.2562	-.1956	-.0652	-.1513
165.000				.1095	-.1967	-.2558	-.3293	-.2930	.1555	.3072	.3247	-.0442	-.2275	-.0218	-.0691
180.000	1.2900	1.0120	.5835	.1119	-.1908	-.2515	-.3241	-.2407	.1149	.2791	.4098	-.1027	-.1825	-.0119	-.0801
270.000		1.1010							.6144						

X/LT	.7460	.8530	.9280
PHI			

AP211-715 IA14 01+T12+S12N25+AT1G EXTERNAL TANK (RB1T33)

ALPHAO(7) = 1.920 BETAO (7) = 2.050

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0074	.0082	.0422
30.000	.0085	.0093	.0396
60.000	.0074	.0375	.1153
90.000	.0153	.0811	
120.000	.0403	.1362	.2875
135.000	.0335	.1752	.1840
150.000	.0275	.1678	.1443
165.000	.0411	.1942	.2956
180.000	.0338	.2193	.2506

ALPHAO(7) = 1.900 BETAO (8) = 4.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0090	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2790	1.0770	.6679	.1887	-.1339	-.1977	-.2728	-.2475	-.1618	.2171	.0475	-.1131	-.1642	-.1136	-.0315
30.000			.6103	.1401	-.1723	-.2343	-.3035	-.2697	-.0155	.2262	-.0492	-.1639	-.1599	-.0946	-.0194
60.000			.5637	.0939	-.2015	-.2594	-.3387	-.2930	.0999	.0389	-.1690	-.1729	-.0666	-.0619	-.0281
90.000		.9602	.5338	.0735	-.2225	-.2774	-.3460	-.2663	.6228		-.5082	-.1199	-.0854	-.0567	- 0843
120.000			.5270	.0711	-.2243	-.2794	-.3460	-.2927	.2380	.0137	-.0909	-.1591	-.0711	-.0137	-.1010
135.000								-.3024		.2231		-.2350		-.0378	
150.000			.5429	.0732	-.2172	-.2728	-.3497	-.3005	.1033	.2674	.1001	-.3302	-.1992	-.1055	-.1771
165.000				.0993	-.2005	-.2617	-.3361	-.3008	.1371	.2883	.3091	-.0524	-.2137	-.0263	-.0845
180.000	1.2790	1.0150	.5848	.1163	-.1913	-.2505	-.3264	-.2378	.1108	.2563	.4073	-.1652	-.2000	-.0509	-.0955
270.000		1.1470							.6137						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0030	.0002	.0420
30.000	.0103	.0117	.0430
60.000	.0051	.0300	.1233
90.000	.0160	.0802	
120.000	.0410	.1335	.2025
135.000	.0241	.1427	.1424
150.000	.0226	.1178	.0773
165.000	.0326	.1701	.2454
180.000	.0226	.1931	.2501

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHA0(7) = 2.040 BETA0 (9) = 6.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2590	1.0660	.6601	.1808	-.1398	-.2063	-.2811	-.2522	-.1334	.1628	.0210	-.1206	-.1588	-.1228	-.0614
30.000			.5752	.1118	-.1977	-.2595	-.3246	-.2899	-.0694	.2298	-.0387	-.1810	-.1626	-.0975	-.0282
60.000			.5164	.0553	-.2337	-.2896	-.3576	-.2993	.2431	.0712	-.1653	-.1354	-.1062	-.0722	-.0333
90.000		.9053	.4852	.0360	-.2511	-.3066	-.3704	-.0126	.6487		-.5361	-.0837	-.1423	-.0677	-.0742
120.000			.4805	.0363	-.2527	-.3076	-.3685	-.3175	.1920	.0427	-.0936	-.0834	-.1044	-.0417	-.1092
135.000								-.3245		.2402		-.2360		-.0766	
150.000			.5083	.0483	-.2421	-.2940	-.3675	-.3198	.0863	.2229	.0474	-.3670	-.2048	-.1325	-.1604
165.000				.0778	-.2203	-.2803	-.3502	-.3156	.1215	.2624	.2903	-.0732	-.1927	-.0367	-.1134
180.000	1.2590	.9998	.5682	.1003	-.2023	-.2621	-.3340	-.2492	.1039	.2389	.3772	-.2097	-.2409	-.0690	-.1160
270.000		1.1880							.6165						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0163	-.0052	.0269
30.000	.0014	.0445	.0436
60.000	-.0064	.0628	.1121
90.000	.0165	.1062	
120.000	.0254	.1310	.2084
135.000	.0087	.1282	.1333
150.000	.0023	.1054	.0318
165.000	.0212	.1420	.2590
180.000	.0078	.1579	.2961

ALPHA0(7) = 2.030 BETA0 (10) = 8.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2300	1.0320	.6387	.1665	-.1491	-.2144	-.2889	-.2635	-.0978	.0739	-.0176	-.1245	-.1540	-.1435	-.0933
30.000			.5347	.0799	-.2213	-.2773	-.3410	-.3137	.0468	.1586	-.0553	-.2001	-.1522	-.1066	-.0352
60.000			.4660	.0172	-.2604	-.3138	-.3558	-.3173	.2188	.0791	-.1662	-.1101	-.1280	-.0753	-.0341
90.000		.8475	.4364	-.0041	-.2755	-.3259	-.3871	-.0288	.6282		-.5417	-.0626	-.1727	-.0648	-.0612
120.000			.4361	-.0025	-.2729	-.3259	-.3871	-.1454	.1046	.0770	-.0911	-.0408	-.1390	-.0648	-.1178
135.000								-.1747		.1987		-.2188		-.1107	
150.000			.4718	.0204	-.2640	-.3115	-.3832	-.2760	.0718	.2044	.0296	-.4126	-.2133	-.1797	-.1601
165.000				.0552	-.2367	-.2922	-.3652	-.3309	.0895	.2255	.2594	-.1259	-.1846	-.1139	-.1580
180.000	1.2300	.9076	.5586	.0891	-.2115	-.2714	-.3440	-.2578	.1007	.1977	.3418	-.2170	-.2641	-.1818	-.1643
270.000		1.2320							.6193						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 TA14 01+T12*S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHA0(7) = 2.030 BETA0 (10) = 8.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0208	-.0085	-.0216
30.000	.0186	.0172	.0229
60.000	.0001	.0250	.1077
90.000	.0072	.0925	
120.000	.0155	.1207	.2654
135.000	-.0035	.1328	.1566
150.000	-.0090	.1105	.0303
165.000	-.0006	.1147	.2601
180.000	-.0242	.1427	.2821

ALPHA0(7) = 2.350 BETA0 (11) = 10.150

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1980	1.0060	.6245	.1606	-.1561	-.2207	-.2966	-.2731	-.0966	-.0037	-.0575	-.1260	-.1490	-.1610	-.0763
30.000			.4966	.0538	-.2395	-.3023	-.3666	-.3427	.0507	.1288	-.0759	-.2058	-.1475	-.0699	-.0092
60.000			.4239	-.0150	-.2893	-.3403	-.3642	-.3354	.1514	.1069	-.1516	-.0754	-.1385	-.0208	-.0477
90.000		.7996	.3940	-.0384	-.3022	-.3491	-.4047	-.0502	.6124		-.4959	-.0656	-.1853	-.0420	-.0777
120.000			.3961	-.0334	-.2996	-.3496	-.4058	-.0671	.0116	.1022	-.0915	-.0469	-.1074	-.0695	-.1413
135.000								-.0731		.0790		-.2248		-.1034	
150.000			.4334	-.0114	-.2883	-.3362	-.4076	-.0796	.0357	.2335	.0239	-.4452	-.1884	-.1827	-.2313
165.000				.0283	-.2567	-.3154	-.3874	-.2912	.0542	.1851	.2284	-.1503	-.1784	-.1522	-.1297
180.000	1.1980	.8413	.5415	.0694	-.2232	-.2843	-.3579	-.2664	.0787	.1561	.2722	-.1802	-.1787	-.2509	-.2014
270.000		1.2690							.6253						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0633	-.0450	-.0516
30.000	-.0184	-.0141	-.0030
60.000	-.0352	-.0018	.1039
90.000	-.0237	.0723	
120.000	-.0007	.1040	.2582
135.000	-.0245	.1224	.1398
150.000	-.0294	.0964	.0060
165.000	-.0347	.0887	.2608
180.000	-.0708	.1126	.2446

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(8) = 4.300 BETAO (1) = -9.980

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0450	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1830	1.0490	.6779	.2097	-.1223	-.1864	-.2637	-.2425	-.0513	-.0029	-.0346	-.0971	-.1147	-.1362	-.1009
30.000			.8211	.3410	-.0177	-.0895	-.1739	-.1479	.1714	.0004	-.2779	-.0667	-.0116	-.0458	-.0584
60.000			.8989	.4113	.0405	-.0334	-.1347	-.0554	.2308	-.0400	-.2093	-.0809	.0315	.0247	.0074
90.000		1.2560	.8752	.3898	.0215	-.0530	-.1427	.1388	.6008		-.3378	-.2347	-.1902	-.2523	-.1507
120.000			.7602	.2846	-.0631	-.1310	-.2163	-.1410	.1909	-.2430	-.3687	-.3047	.1637	.2300	.1547
135.000								-.2189		-.2000		-.0741		.1781	
150.000			.6369	.1698	-.1465	-.2142	-.3012	-.2527	.0056	-.1843	.2108	-.1173	-.0899	.0569	.0656
165.000				.0913	-.2167	-.2757	-.3506	-.3158	-.0816	.2667	.3831	.1625	-.2508	-.0237	.0332
180.000	1.1830	.9351	.4895	.0533	-.2496	-.3029	-.3662	-.3158	.0225	.3758	.4611	-.1970	-.4229	-.0944	-.0118
270.000		.7800							.6162						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0512	-.0211	-.0623
30.000	.0073	.0558	.0019
60.000	.0415	.1616	.1077
90.000	-.0329	-.1349	
120.000	.0830	.2336	.9004
135.000	.1387	.4171	.6636
150.000	.1455	.4189	.7026
165.000	.1562	.4014	.7000
180.000	.1297	.3245	.4960

ALPHAO(8) = 4.200 BETAO (2) = -8.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0430	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2200	1.0840	.6966	.2222	-.1118	-.1773	-.2549	-.2261	-.1351	.1362	.0011	-.0980	-.1198	-.1140	-.0904
30.000			.8075	.3205	-.0342	-.1066	-.1934	-.1567	.1705	.0335	-.1899	-.0689	-.0236	-.0480	-.0481
60.000			.8580	.3680	.0033	-.0695	-.1642	-.0872	.4287	-.0280	-.2065	-.0446	.0291	.0260	.0084
90.000		1.2180	.8262	.3428	-.0209	-.0941	-.1795	-.0433	.5923		-.3547	-.2136	-.0752	-.1425	-.1454
120.000			.7235	.2468	-.0951	-.1624	-.2417	-.1798	.1899	-.2358	-.3634	-.3121	.1077	.1759	.1002
135.000								-.2339		-.1713		-.1030		.1427	
150.000			.6247	.1537	-.1653	-.2288	-.3067	-.2615	.0346	-.0868	.2204	-.1502	-.1991	.0258	.0329
165.000				.0926	-.2134	-.2743	-.3452	-.3051	-.0369	.3290	.4024	.1450	-.2670	-.0933	.0206
180.000	1.2200	.9482	.9080	.0563	-.2405	-.2938	-.3566	-.3020	.0714	.3591	.4644	-.2130	-.3320	-.0930	-.0116
270.000		.8326							.6054						

X/LT	.7460	.8530	.9280
PHI			

ARC11-715 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHA(6) = 4.200 BETA(2) = -8.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0369	.0194	-.0064
30.000	-.0228	.0809	.0310
60.000	.0180	.1285	.0872
90.000	-.0682	-.1627	
120.000	.0587	.2130	.8300
135.000	.1074	.3900	.6101
150.000	.1225	.3978	.6561
165.000	.1384	.3992	.6556
180.000	.1366	.3291	.4703

ALPHA(8) = 4.200 BETA(3) = -5.990

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0005	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2930	.3440	.3940	.4510	.5060	.5580	.6380
PHI															
.000	1.2480	1.1170	.7211	.2348	-.1000	-.1691	-.2455	-.2180	-.1658	.2049	.0354	-.0893	-.1262	-.0952	-.0567
30.000			.7956	.3021	-.0461	-.1186	-.1935	-.1715	.1630	.0804	-.1346	-.0691	-.0436	-.0470	-.0322
60.000			.8132	.3218	-.0377	-.1004	-.1967	-.1391	.4290	-.0124	-.1954	-.1277	.0227	.0157	.0055
90.000		1.1740	.7715	.2891	-.0604	-.1306	-.2152	-.1590	.5831		-.3701	-.2057	.0135	-.0431	-.0668
120.000			.6832	.2069	-.1230	-.1890	-.2661	-.2099	.1892	-.2316	-.3471	-.2923	.0779	.1335	.0523
135.000								-.2481		-.1077		-.1735		.1100	
150.000			.6046	.1375	-.1766	-.2394	-.3169	-.2699	.0556	.0944	.2159	-.1827	-.1957	.0154	.0022
165.000				.0921	-.2165	-.2756	-.3429	-.2982	.0893	.3507	.4118	.1003	-.2870	-.0241	.0051
180.000	1.2480	.9908	.5179	.0608	-.2348	-.2902	-.3536	-.2901	.0565	.3087	.4650	-.2306	-.3389	-.0671	-.0331
270.000		.8885							.6017						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0187	.0074	.0519
30.000	-.0058	.0510	.0438
60.000	.0225	.1076	.0758
90.000	-.0222	.0311	
120.000	.0305	.1952	.7366
135.000	.0735	.3531	.5493
150.000	.0879	.3635	.6018
165.000	.1069	.3597	.6137
180.000	.1063	.3109	.4462

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1733)

ALPHA0(8) = 4.200 BETA0 (4) = -3.970

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2670	1.1350	.7317	.2385	-.0907	-.1591	-.2382	-.2117	-.1518	.2455	.0757	-.0911	-.1275	-.0728	-.0334
30.000			.7707	.2768	-.0667	-.1345	-.2133	-.1819	.1764	.1250	-.0911	-.0746	-.0679	-.0485	-.0185
60.000			.7659	.2755	-.0659	-.1336	-.2263	-.1764	.4227	.0051	-.1809	-.1317	.0104	-.0028	-.0045
90.000		1.129	.7199	.2380	-.0983	-.1657	-.2455	-.1868	.5776		-.3951	-.2228	.0125	-.0344	-.0610
120.000			.6469	.1749	-.1488	-.2117	-.2889	-.2300	.1968	-.1995	-.3365	-.2996	.0446	.1015	.0174
135.000								-.2550		-.0327		-.2205		.0847	
150.000			.5930	.1220	-.1897	-.2469	-.3260	-.2754	.0823	.1660	.2039	-.1870	-.2072	.0165	-.0157
165.000				.0870	-.2159	- 2739	-.3404	-.2993	.1279	.3212	.3900	.0631	-.3198	.0025	-.0087
180.000	1.2670	.9559	.5233	.0623	-.2264	-.2911	-.3481	-.2437	.0694	.2459	.4596	-.1893	-.3460	-.0313	-.0340
270.000		.9451							.5090						

X/LT	.7480	.8530	.9280
PHI			
.000	.0056	.0221	.0487
30.000	.0134	.0483	.0526
60.000	.0187	.0951	.0914
90.000	-.0043	.0642	
120.000	.0174	.1773	.6287
135.000	.0535	.3148	.4790
150.000	.0582	.3247	.5123
165.000	.0869	.3287	.5476
180.000	.0884	.2788	.4176

ALPHA0(8) = 4.220 BETA0 (5) = -2.000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2800	1.1460	.7364	.2433	-.0891	-.1559	-.2350	-.2052	-.1431	.2571	.0886	-.0915	-.1216	-.0619	-.0220
30.000			.7906	.2539	-.0866	-.1495	-.2263	-.1954	.1266	.1676	-.0511	-.0844	-.0865	-.0393	-.0155
60.000			.7235	.2339	-.0891	-.1626	-.2505	-.2060	.3866	.0228	-.1636	-.1334	.0006	-.0142	-.0065
90.000		1.0870	.6728	.1954	-.1314	-.1971	-.2731	-.2099	.5743		-.4098	-.2408	-.0186	-.0510	-.0716
120.000			.6104	.1462	-.1736	-.2337	-.3053	-.2505	.2085	-.1458	-.3190	-.3024	.0195	0790	-.0035
135.000								-.2676		.0104		-.2526		.0652	
150.000			.5685	.1048	-.1997	-.2565	-.3316	-.2791	.2025	.2237	.1802	-.1973	-.2261	.0219	-.0382
165.000				.0858	-.2168	-.27[illegible]	-.3417	-.3025	.0904	.2709	.3726	.0190	-.2282	.0102	-.0225
180.000	1.2800	.9994	.5281	.0684	-.2214	-.2803	-.3425	-.1995	.0713	.2113	.4296	-.1300	-.2801	.0110	-.0332
270.000		.9936							.5999						

X/LT	.7480	.8530	.9280
PHI			

ARC11-716 IA14 01+712+S12N2S+AT10 EXTERNAL TANK (RB1T33)

ALPHA(8) = 4.220 BETA(5) = -2.000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L	.7460	.8530	.9280
PHI			
.000	.0143	.0306	.0564
30.000	.0149	.0480	.0696
60.000	.0097	.0816	.1009
90.000	-.0100	.0847	
120.000	.0107	.1826	.5085
135.000	.0400	.2831	.4021
150.000	.0321	.2901	.4054
165.000	.0699	.2899	.5062
180.000	.0699	.2506	.4023

ALPHA(8) = 4.240 BETA(6) = -.070

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2830	1.1480	.7380	.2459	-.0872	-.1590	-.2356	-.2063	-.1400	.2795	.0853	-.0971	-.1231	-.0586	-.0139
30.000			.7178	.2321	-.1031	-.1731	-.2469	-.2165	.1213	.1893	-.0318	-.1042	-.1019	-.0575	-.0126
60.000			.6755	.1919	-.1530	-.1952	-.2790	-.2425	.2110	.0485	-.1584	-.1139	-.0200	-.0350	-.0170
90.000		1.0380	.6183	.1535	-.1684	-.2302	-.3033	-.2337	.5736		-.4290	-.2150	-.0365	-.0646	-.0800
120.000			.5680	.1063	-.2007	-.2600	-.3269	-.2765	.2447	-.1263	-.3005	-.2901	-.0106	.0474	-.0344
135.000								-.2857		.0557		-.2788		.0448	
150.000			.5444	.0817	-.2173	-.2723	-.3467	-.2886	.1831	.2683	.1323	-.2095	-.2437	-.0009	-.0850
165.000				.0751	-.2255	-.2792	-.3460	-.3081	.1181	.2449	.3600	-.0325	-.2589	-.0002	-.0443
180.000	1.2830	.9551	.5306	.0697	-.2234	-.2822	-.3475	-.2458	.0916	.2280	.3915	-.0299	-.2277	.0074	-.0285
270.000		1.0420							.5954						

X/L	.7460	.8530	.9280
PHI			
.000	.0127	.0283	.0470
30.000	.0127	.0369	.0603
60.000	.0068	.0679	.1007
90.000	.0080	.0750	
120.000	.0912	.1606	.3995
135.000	.0551	.2394	.2913
150.000	.0398	.2324	.2772
165.000	.0742	.2428	.3252
180.000	.0638	.2391	.2986

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (R81T33)

ALPHA0(6) = 4.220 BETA0 (7) = 1.930

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2780	1.1450	.7348	.2456	-.0895	-.1578	-.2349	-.2022	-.1462	.3043	.0920	-.0981	-.1271	-.0516	-.0203
30.000			.6883	.2068	-.1224	-.1889	-.2630	-.2301	-.0740	.2624	-.0147	-.1258	-.1029	-.0576	-.0188
60.000			.6291	.1559	-.1625	-.2244	-.3046	-.2545	.2920	.0786	-.1463	-.0960	-.0343	-.0513	-.0271
90.000		.9920	.5728	.1101	-.1975	-.2568	-.3296	-.0895	.5922		-.4304	-.1713	-.0421	-.0745	.0751
120.000			.5325	.0776	-.2230	-.2798	-.3426	-.2868	.2588	-.0957	-.2436	-.2477	-.0463	.0121	-.0490
135.000								-.2918		.1296		-.2705		.0128	
150.000			.5217	.0657	-.2268	-.2826	-.3566	-.2978	.1174	.2815	.1145	-.2553	-.2395	-.0347	-.1044
165.000				.0673	-.2279	-.2837	-.3504	-.3134	.1179	.2755	.3081	-.0486	-.2513	-.0141	-.0311
180.000	1.2780	.9545	.5284	.0675	-.2240	-.2816	-.3475	-.2528	.0990	.2533	.3995	-.0748	-.2120	.0033	-.0379
270.000		1.0900							.5880						

X/LT	.7460	.8530	.9280
PHI			
.000	.0107	.0290	.0590
30.000	.0143	.0345	.0484
60.000	.0174	.0542	.0819
90.000	.0299	.0635	
120.000	.0682	.1692	.2883
135.000	.0615	.2009	.1993
150.000	.0557	.1905	.1684
165.000	.0724	.2203	.3143
180.000	.0713	.2395	.2623

ALPHA0(8) = 4.430 BETA0 (8) = 4.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2650	1.1300	.7267	.2410	-.0938	-.1624	-.2404	-.2093	-.1489	.2510	.0762	-.0889	-.1314	-.0815	-.0405
30.000			.6529	.1768	-.1450	-.2125	-.2854	-.2514	-.1426	.2819	-.0123	-.1419	-.1206	-.0822	-.0314
60.000			.5799	.1144	-.1954	-.2563	-.3300	-.2658	.3144	.1065	-.1341	-.1109	-.0529	-.0605	-.0269
90.000		.9409	.5246	.0639	-.2287	-.2852	-.3537	-.1333	.6027		-.4213	-.1324	-.0311	-.0653	-.0653
120.000			.4933	.0421	-.2479	-.3005	-.3586	-.3050	.2127	-.0721	-.2154	-.2432	-.0752	-.0139	-.0598
135.000								-.3115		.1638		-.2794		-.0311	
150.000			.4933	.0385	-.2471	-.2993	-.3709	-.3170	.0784	.2647	.1058	-.3387	-.2360	-.0802	-.1332
165.000				.0521	-.2400	-.2949	-.3628	-.3240	.0969	.2685	.2979	-.0545	-.2455	-.0288	-.0360
180.000	1.2650	.9515	.5238	.0599	-.2313	-.2883	-.3558	-.2725	.0826	.2306	.3915	-.1149	-.2271	-.0356	-.0493
270.000		1.1370							.5896						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(8) = 4.430 BETAO (8) = 4.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0033	.0192	.0560
30.000	.0132	.0299	.0514
60.000	.0145	.0484	.0824
90.000	.0391	.0622	
120.000	.0677	.1576	.2093
135.000	.0542	.1620	.1488
150.000	.0507	.1378	.0842
165.000	.0648	.1890	.2469
180.000	.0565	.2098	.2581

ALPHAO(8) = 4.410 BETAO (9) = 6.060

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2480	1.1180	.7214	.2359	-.0964	-.1662	-.2437	-.2176	-.1300	.1878	.0528	-.0807	-.1323	-.1021	-.0627
30.000			.6190	.1500	-.1665	-.2325	-.3022	-.2721	-.1172	.2591	-.0060	-.1496	-.1463	-.0942	-.0390
60.000			.5294	.0741	-.2247	-.2810	-.3449	-.2955	.2580	.1357	-.1184	-.1320	-.0722	-.0767	-.0262
90.000		.8012	.4755	.0265	-.2550	-.3085	-.3522	-.2038	.6018		-.4105	-.0951	-.0100	-.0684	-.0580
120.000			.4530	.0113	-.2670	-.3167	-.3581	-.2731	.1541	-.0490	-.2006	-.0738	-.0832	-.0431	-.0676
135.000								-.3027		.1834		-.2698		-.0671	
150.000			.4646	.0146	-.2614	-.3113	-.3813	-.2960	.0535	.2220	.0730	-.3635	-.2634	-.1042	-.1122
165.000				.0330	-.2484	-.3029	-.3719	-.3334	.0823	.2459	.2765	-.0644	-.1953	-.0290	-.0754
180.000	1.2480	.9367	.5117	.0509	-.2351	-.2912	-.3613	-.2929	.0820	.2078	.3629	-.1731	-.2647	-.0421	-.0840
270.000		1.1740							.5917						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0130	.0032	.0629
30.000	.0009	.0360	.0598
60.000	.0061	.0763	.1066
90.000	.0352	.0922	
120.000	.0577	.1517	.2186
135.000	.0406	.1481	.1456
150.000	.0316	.1228	.0340
165.000	.0511	.1567	.2698
180.000	.0373	.1791	.3135

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(8) = 4.410 BETAO (10) = 8.150

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2180	1.0860	.6997	.2219	-.1055	-.1720	-.2538	-.2261	-.0786	.0909	.0105	-.0852	-.1358	-.1227	-.0899
30.000			.5717	.1125	-.1960	-.2556	-.3243	-.2969	.0071	.1885	-.0251	-.1646	-.1486	-.1127	-.0528
60.000			.4784	.0301	-.2525	-.3095	-.3377	-.3125	.1788	.1524	-.1027	-.1395	-.0928	-.0912	-.0371
90.000		.8355	.4287	-.0129	-.2824	-.3335	-.3481	-.1866	.5985		-.4111	-.0616	-.0495	-.0773	-.0426
120.000			.4126	-.0225	-.2878	-.3369	-.3816	-.1815	.1054	-.0175	-.1919	-.1675	-.1096	-.0695	-.0663
135.000								-.1216		.1737		-.2750		-.0932	
150.000			.4346	-.0116	-.2816	-.3287	-.3993	-.1468	.0442	.1911	.0504	-.4080	-.2391	-.1369	-.1121
165.000				.0153	-.2666	-.3205	-.3863	-.3348	.0626	.2061	.2585	-.1200	-.2399	-.0979	-.1248
180.000	1.2180	.8440	.5025	.0423	-.2469	-.3039	-.3736	-.2945	.0938	.1739	.2998	-.1990	-.2803	-.1562	-.1144
270.000		1.2190							.0968						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0188	.0202	.0098
30.000	.0359	.0254	.0384
60.000	.0245	.0421	.1074
90.000	.0333	.0892	
120.000	.0473	.1405	.2632
135.000	.0292	.1555	.1662
150.000	.0215	.1295	.0387
165.000	.0358	.1373	.2856
180.000	.0158	.1649	.2976

ALPHAO(8) = 4.390 BETAO (11) = 10.140

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1830	1.0480	.6743	.2055	-.1193	-.1866	-.2668	-.2438	-.0657	.0107	-.0433	-.0990	-.1419	-.1390	-.0908
30.000			.5253	.0768	-.2264	-.2850	-.3523	-.3295	.0703	.1509	-.0467	-.1714	-.1527	-.0890	-.0069
60.000			.4276	-.0106	-.2881	-.3397	-.3350	-.3034	.1052	.1445	-.0717	-.1203	-.1140	-.0489	-.0383
90.000		.7794	.3831	-.0461	-.3079	-.3523	-.3384	-.1708	.5796		-.3961	-.0173	-.0529	-.0181	-.0819
120.000			.3748	-.0522	-.3092	-.3572	-.4106	-.1018	.0627	.0245	-.1738	-.1280	-.0845	-.0572	-.1183
135.000								-.0966		.1211		-.2738		-.0837	
150.000			.4010	-.0365	-.3066	-.3503	-.4195	-.1018	.0151	.2078	.0346	-.4100	-.2128	-.1509	-.1653
165.000				-.0065	-.2830	-.3392	-.4075	-.1844	.0460	.1691	.2195	-.1701	-.2588	-.1380	-.1551
180.000	1.1830	.7799	.4910	.0312	-.2560	-.3143	-.3837	-.2976	.0637	.1416	.2322	-.1783	-.2530	-.2330	-.1734
270.000		1.2580							.6080						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(8) = 4.390 BETAO (11) = 10.140

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0514	-.0410	-.0423
30.000	-.0118	-.0092	.0122
60.000	-.0129	.0098	.1000
90.000	-.0014	.0726	
120.000	.0249	.1282	.2438
135.000	.0038	.1348	.1403
150.000	.0002	.1009	.0067
165.000	-.0048	.1126	.2746
180.000	-.0400	.1011	.2477

ALPHAO(9) = 6.340 BETAO (1) = -9.960

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1640	1.0850	.7261	.2556	-.0798	-.1528	-.2311	-.2061	-.0093	-.0163	-.0225	-.0592	-.1029	-.1189	-.1033
30.000			.8700	.3901	.0230	-.0525	-.1411	-.1103	.2173	.0472	-.2254	-.0388	-.0056	-.0103	-.0233
60.000			.9261	.4392	.0651	-.0104	-.1123	-.0324	.4745	.0063	-.1346	-.1178	.0389	.0648	.0645
90.000		1.2360	.8664	.3857	.0199	-.0571	-.1399	.2124	.5794		-.2960	-.1733	.0249	.0827	.0516
120.000			.7179	.2529	-.0895	-.1589	-.2385	-.1760	.1218	-.2916	-.3235	-.2424	.0609	.1562	.1591
135.000								-.2469		-.2615		-.2511		.1617	
150.000			.5841	.1283	-.1834	-.2472	-.3281	-.2824	-.0547	-.2437	.0995	-.1181	-.0856	.0475	.0822
165.000				.0466	-.2498	-.3059	-.3759	-.3383	-.1238	.2078	.3409	.1669	-.2348	-.0220	.0555
180.000	1.1640	.8832	.4436	.0092	-.2776	-.3289	-.3845	-.3367	.0032	.3445	.4504	-.1945	-.4063	-.0947	.0319
270.000		.7613							.5911						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0363	-.0340	-.0283
30.000	.0361	.0695	.0445
60.000	.0855	.1796	.0905
90.000	.0842	.0282	
120.000	.1850	.2262	.8466
135.000	.2148	.4166	.6374
150.000	.1945	.4166	.6974
165.000	.1950	.3989	.7242
180.000	.1589	.3296	.5229

ARC11-715 IA14 C1+T12+S12N25+AT10 EXTERNAL TANK (RB1T3D)

ALPHAO(8) = 6.380 BETAO (2) = -7.370

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2020	1.1280	.7522	.2713	-.0676	-.1385	-.2190	-.1929	-.1072	.1659	.0260	-.0662	-.0869	-.0890	-.0780
30.000			.6590	.3719	.0082	-.0669	-.1523	-.1201	.2218	.0795	-.1382	-.0288	.0014	-.0150	-.0207
60.000			.8833	.3970	.0277	-.0462	-.1443	-.0911	.4787	.0252	-.1536	-.0558	.0348	.0441	.0348
90.000		1.1980	.8125	.3339	-.0260	-.0997	-.1822	.0267	.5657		-.3577	-.1649	.0058	.0477	.0244
120.000			.6801	.2105	-.1234	-.1894	-.2663	-.2126	.1135	-.3025	-.3331	-.2693	.0632	.1435	.1277
135.000								-.2708		-.2413		-.2316		.1322	
150.000			.3702	.1086	-.2014	-.2520	-.3393	-.2913	-.0380	-.1513	.1539	-.1811	-.1275	.0278	.0594
165.000				.0462	-.2464	-.3062	-.3736	-.3243	-.0642	.2877	.3664	.1370	-.2722	-.0512	.0529
180.000	1.2020	.8934	.4546	.0138	-.2720	-.3193	-.3762	-.3227	.0586	.3250	.4511	-.2167	-.3300	-.0874	.0234
270.000		.8151							.5658						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0468	.0354	.0271
30.000	-.0072	.0765	.0695
60.000	.0602	.1513	.0980
90.000	.0614	.0308	
120.000	.1345	.1934	.8100
135.000	.1679	.3887	.6019
150.000	.1658	.4031	.6606
165.000	.1778	.3879	.7022
180.000	.1671	.3336	.4954

ALPHAO(9) = 5.980 BETAO (3) = -6.000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2330	1.1540	.7644	.2786	-.0650	-.1353	-.2160	-.1881	-.1378	.2224	.0635	-.0689	-.0924	-.0720	-.0520
30.000			.8352	.3468	-.0137	-.0870	-.1726	-.1419	.2396	.1085	-.0960	-.0356	-.0144	-.0184	-.0236
60.000			.8359	.3458	-.0137	-.0834	-.1793	-.1385	.4671	.0327	-.1675	-.0594	.0368	.0236	.0084
90.000		1.1570	.7649	.2848	-.0643	-.1345	-.2164	-.0934	.5614		-.3684	-.1958	.0112	-.0064	-.0358
120.000			.6467	.1809	-.1442	-.2076	-.2839	-.2317	.1274	-.2917	-.3401	-.2800	.0518	.1306	.0871
135.000								-.2733		-.1931		-.2141		.1109	
150.000			.5587	.0998	-.2076	-.2651	-.3395	-.2928	-.0028	.0246	.1709	-.2107	-.1816	.0229	.0293
165.000				.0516	-.2428	-.3003	-.3654	-.3101	.0831	.3184	.3823	.1124	-.2996	-.0207	.0355
180.000	1.2330	.9060	.4729	.0261	-.2602	-.3116	-.3714	-.2909	.0378	.2814	.4434	-.2159	-.3399	-.0428	.0014
270.000		.8758							.5695						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 C1+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(9) = 5.980 BETAO (3) = -6.000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0170	.0092	.0505
30.000	.0058	.0596	.0511
60.000	.0384	.1202	.0721
90.000	.0195	.0087	
120.000	.0809	.1984	.7464
135.000	.1130	.3650	.5594
150.000	.1215	.3731	.6041
165.000	.1368	.3656	.6239
180.000	.1319	.3175	.4537

ALPHAO(9) = 5.990 BETAO (4) = -4.010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6390
PHI															
.000	1.2510	1.1720	.7737	.2814	-.0594	-.1302	-.2116	-.1855	-.1291	.2570	.0985	-.0705	-.0948	-.0537	-.0259
30.000			.8106	.3176	-.0357	-.1072	-.1891	-.1582	.1873	.1477	-.0573	-.0385	-.0414	-.0244	-.0131
60.000			.7874	.2982	-.0505	-.1181	-.2133	-.1707	.4487	.0446	-.1667	-.0689	.0218	.0045	-.0010
90.000		1.1130	.7122	.2339	-.1041	-.1710	-.2500	-.1512	.5553		-.3916	-.2111	.0058	-.0126	-.0462
120.000			.0150	.1504	-.1700	-.2323	-.3062	-.2593	.1318	-.2772	-.3560	-.2912	.0281	.1033	.0487
135.000								-.2830		-.0812		-.2703		.0919	
150.000			.5476	.0897	-.2170	-.2737	-.3475	-.2950	.0429	.1130	.1555	-.2320	-.2129	.0262	.0068
165.000				.0508	-.2430	-.2992	-.3631	-.3072	.1265	.3023	.3652	.0493	-.3261	.0034	.0210
180.000	1.2510	.9109	.4817	.0284	-.2509	-.3048	-.3683	-.2193	.0351	.2370	.4339	-.1781	-.3515	-.0157	-.0106
270.000		.9254							.5667						

X/LT	.7460	.8530	.9280
PHI			
.000	.0055	.0313	.0570
30.000	.0254	.0594	.0638
60.000	.0314	.1080	.0851
90.000	.0192	.0568	
120.000	.0578	.1940	.6499
135.000	.0865	.3307	.4960
150.000	.0868	.3375	.5319
165.000	.1153	.3362	.5615
180.000	.1108	.2907	.4209

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(9) = 0.010 BETAO (5) = -2.060

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2610	1.1840	.7799	.2870	-.0554	-.1247	-.2085	-.1789	-.1210	.2754	.1110	-.0700	-.0857	-.0343	-.0116
30.000			.7871	.2939	-.0526	-.1239	-.2065	-.1742	.1665	.1673	-.0150	-.0564	-.0501	-.0270	-.0098
60.000			.7429	.2497	-.0832	-.1485	-.2395	-.2020	.3217	.0654	-.1585	-.0537	.0053	-.0090	-.0087
90.000		1.0700	.6616	.1895	-.1387	-.2034	-.2797	-.1867	.5455		-.3954	-.2063	.0048	-.0194	-.0444
120.000			.5803	.1205	-.1940	-.2533	-.3237	-.2738	.1364	-.2125	-.3626	-.3072	-.0069	.0745	.0211
135.000								-.2891		-.0409		-.2663		.0706	
150.000			.5284	.0691	-.2282	-.2817	-.3528	-.2959	.1548	.1637	.1338	-.2281	-.2254	.0286	-.0204
165.000				.0491	-.2443	-.2975	-.3616	-.3122	.0693	.2495	.3407	.0071	-.2459	.0118	.0040
180.000	1.2610	.9099	.4842	.0336	-.2487	-.3037	-.3634	-.1651	.0486	.1888	.4058	-.1214	-.2781	.0123	-.0103
270.000		.9750							.5717						

X/LT	.7460	.8530	.9280
PHI			
.000	.0177	.0394	.0638
30.000	.0206	.0565	.0750
60.000	.0211	.0926	.0934
90.000	.0151	.0781	
120.000	.0564	.2052	.5150
135.000	.0722	.3008	.4118
150.000	.0617	.3008	.4167
165.000	.0965	.3013	.5046
180.000	.0945	.2603	.3947

ALPHAO(9) = 6.020 BETAO (6) = .050

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2680	1.1880	.7821	.2888	-.0537	-.1238	-.2065	-.1745	-.1217	.3202	.1219	-.0754	-.0903	-.0270	-.0035
30.000			.7565	.2632	-.0736	-.1447	-.2234	-.1919	.0373	.2529	-.0025	-.0830	-.0640	-.0401	-.0079
60.000			.6920	.2072	-.1173	-.1853	-.2685	-.2249	.3760	.0875	-.1454	-.0484	-.0108	-.0280	-.0105
90.000		1.0200	.6120	.1451	-.1701	-.2334	-.3077	-.0860	.5515		-.3925	-.1656	-.0035	-.0188	-.0438
120.000			.5413	.0834	-.2151	-.2747	-.3406	-.2826	.1282	-.1817	-.3469	-.2830	-.0252	.0416	-.0067
135.000								-.2927		.0087		-.3183		.0432	
150.000			.5077	.0526	-.2358	-.2913	-.3588	-.2974	.1554	.1992	.1201	-.2395	-.2385	.0020	-.0567
165.000				.0436	-.2468	-.2987	-.3616	-.3107	.0813	.2038	.3402	-.0243	-.2401	.0009	-.0111
180.000	1.2680	.9105	.4867	.0359	-.2434	-.3010	-.3622	-.2403	.0777	.1963	.3713	.0022	-.2257	.0051	.0032
270.000		1.0290							.5621						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHA0(9) = 6.020 BETA0 (6) = .050

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0151	.0418	.0695
30.000	.0151	.0522	.0594
60.000	.0141	.0761	.0747
90.000	.0306	.0654	
120.000	.0783	.2017	.3722
135.000	.0801	.2562	.2892
150.000	.0639	.2490	.2830
165.000	.0998	.2583	.3581
180.000	.1070	.2523	.3209

ALPHA0(9) = 6.010 BETA0 (7) = 2.060

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2630	1.1850	.7796	.2876	-.0575	-.1295	-.2098	-.1758	-.1234	.3313	.1141	-.0739	-.0970	-.0320	-.0168
30.000			.7221	.2366	-.1005	-.1684	-.2452	-.2145	-.1088	.2945	.0078	-.1014	-.0905	-.0488	-.0264
60.000			.6395	.1656	-.1588	-.2185	-.2890	-.2350	.3713	.1189	-.1269	-.0943	-.0207	-.0347	-.0188
90.000		.9724	.5596	.1027	-.2067	-.2664	-.3369	-.2285	.5452		-.3885	-.1182	.0166	-.0188	-.0358
120.000			.5048	.0515	-.2407	-.2958	-.3585	-.3047	.1643	-.1612	-.3259	-.2681	-.0520	.0092	-.0239
135.000								-.3078		.0815		-.2998		.0110	
150.000			.4853	.0352	-.2526	-.3053	-.3725	-.3056	.1145	.2540	.1165	-.2613	-.2370	-.0306	-.0711
165.000				.0319	-.2553	-.3048	-.3712	-.3273	.0974	.2594	.2998	-.0529	-.2443	-.0137	-.0034
180.000	1.2630	.9051	.4848	.0334	-.2530	-.3063	-.3686	-.2642	.0774	.2355	.3761	-.0259	-.2268	-.0105	-.0039
270.000		1.0770							.0536						

X/LT	.7460	.8530	.9280
PHI			
.000	.0127	.0407	.0688
30.000	.0143	.0462	.0599
60.000	.0215	.0605	.0708
90.000	.0477	.0650	
120.000	.0882	.1914	.2782
135.000	.0822	.2146	.2961
150.000	.0712	.2044	.1942
165.000	.0984	.2350	.3524
180.000	.0957	.2522	.2951

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHA0(9) = 5.990 BETA0 (9) = 4.060

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2530	1.1660	.7561	.2804	-.0642	-.1350	-.2146	-.1859	-.1256	.2772	.0564	-.0717	-.0997	-.0390	-.0366
30.000			.6829	.2037	-.1260	-.1916	-.2668	-.2380	-.1500	.3016	.0108	-.1141	-.1252	-.0742	-.0389
60.000			.5909	.1267	-.1989	-.2485	-.3270	-.2609	.3387	.1403	-.0975	-.1235	-.0598	-.0528	-.0116
90.000		.9271	.5160	.0606	-.2338	-.2923	-.3441	-.2465	.5568		-.3710	-.1834	.0201	-.0251	-.0243
120.000			.4716	.0249	-.2603	-.3112	-.3535	-.3126	.2078	-.1302	-.2826	-.2425	-.0543	-.0051	-.0331
135.000								-.3196		.1346		-.2859		-.0168	
150.000			.4638	.0148	-.2616	-.3130	-.3833	-.3178	.0627	.2467	.1080	-.3231	-.2215	-.0587	-.0953
165.000				.0230	-.2611	-.3112	-.3750	-.3365	.0759	.2563	.2022	-.0589	-.2353	-.0173	.0046
180.000	1.2530	.9103	.4845	.0289	-.2530	-.3066	-.3722	-.2833	.0692	.2014	.3750	-.0010	-.2340	-.0173	-.0074
270.000		1.1200							.5585						

X/LT	.7460	.8530	.9280
PHI			
.000	.0079	.0305	.0695
30.000	.0126	.0362	.0648
60.000	.0245	.0546	.0923
90.000	.0384	.0886	
120.000	.0871	.1664	.2147
135.000	.0752	.1719	.1460
150.000	.0673	.1470	.0879
165.000	.0816	.1950	.2298
180.000	.0800	.2168	.2386

ALPHA0(9) = 5.980 BETA0 (9) = 6.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2320	1.1520	.7589	.2744	-.0691	-.1407	-.2222	-.1940	-.1133	.1977	.0717	-.0704	-.1036	-.0780	-.0636
30.000			.6444	.1724	-.1524	-.2176	-.2906	-.2636	-.1525	.2800	.0101	-.1332	-.1376	-.1013	-.0621
60.000			.5372	.0819	-.2247	-.2804	-.3448	-.2892	.2457	.1747	-.0829	-.1185	-.0947	-.0727	-.0137
90.000		.8747	.4669	.0204	-.2658	-.3187	-.3193	-.2340	.5725		-.3697	-.2148	-.0005	-.0415	-.0337
120.000			.4313	-.0059	-.2832	-.3302	-.3375	-.3056	.1429	-.1064	-.2523	-.2137	-.0638	-.0295	-.0436
135.000								-.3059		.1496		-.2742		-.0470	
150.000			.4349	-.0059	-.2794	-.3292	-.3936	-.2638	.0402	.2244	.0764	-.3464	-.2072	-.0826	-.0912
165.000				.0048	-.2694	-.3238	-.3873	-.3427	.0660	.2303	.2647	-.0759	-.1920	-.0246	-.0431
180.000	1.2320	.8912	.4726	.0179	-.2607	-.3139	-.3796	-.3131	.0634	.1705	.3374	-.1277	-.2580	-.0227	-.0576
270.000		1.1600							.5654						

X/LT	.7460	.8530	.9280
PHI			

\RC11-715 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHA0(9) = 5.980 BETA0 (9) = 6.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0126	.0100	.0715
30.000	-.0100	.0274	.0795
60.000	.0139	.0842	.1361
90.000	.0541	.1272	
120.000	.0756	.1631	.2220
135.000	.0601	.1631	.1481
150.000	.0546	.1361	.0437
165.000	.0671	.1704	.2783
180.000	.0632	.1904	.3139

ALPHA0(9) = 5.970 BETA0 (10) = 8.160

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2050	1.1200	.7379	.2609	-.0763	-.1481	-.2288	-.2006	-.0548	.0890	.0290	-.0689	-.1055	-.0967	-.0883
30.000			.5972	.1355	-.1795	-.2408	-.3090	-.2655	-.1072	.2159	-.0055	-.1448	-.1457	-.1192	-.0815
60.000			.4845	.0375	-.2517	-.3069	-.3390	-.3167	.1696	.1934	-.0653	-.1207	-.1082	-.0925	-.0295
90.000		.8184	.4186	-.0150	-.2857	-.3371	-.3185	-.2159	.5759		-.3761	-.2244	-.0362	-.0708	-.0421
120.000			.3949	-.0374	-.2949	-.3409	-.3408	-.2261	.0839	-.0757	-.2313	-.1872	-.0904	-.0470	-.0479
135.000								-.1430		.1449		-.2792		-.0648	
150.000			.4062	-.0304	-.2939	-.3394	-.4036	-.1477	.0294	.1920	.0547	-.3891	-.2297	-.1110	-.1014
165.000				-.0066	-.2847	-.3360	-.3977	-.2553	.0498	.1902	.2454	-.1252	-.2452	-.0666	-.0776
180.000	1.2050	.8000	.4629	.0099	-.2981	-.3510	-.3897	-.2160	.0809	.1593	.2617	-.1849	-.2627	-.1125	-.0889
270.000		1.2060							.5761						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0488	.0339	.0245
30.000	.0244	.0241	.0487
60.000	.0433	.0901	.1379
90.000	.0472	.1257	
120.000	.0710	.1627	.2510
135.000	.0544	.1692	.1667
150.000	.0404	.1434	.0515
165.000	.0584	.1581	.2988
180.000	.0425	.1737	.3369

ARC11-716 IA14 OL+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(9) = 5.950 BETAO (11) = 10.150

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1690	1.0800	.7144	.2458	-.0858	-.1576	-.2387	-.2161	-.0394	-.0029	-.0343	-.0768	-.1098	-.1173	-.0915
30.000			.5468	.0952	-.2070	-.2686	-.3382	-.3172	.0716	.1709	-.0215	-.1465	-.1466	-.1291	-.0815
60.000			.4289	-.0025	-.2848	-.3387	-.3322	-.3323	.1221	.1639	-.0406	-.1177	-.1241	-.0607	-.0314
90.000		.7675	.3727	-.0533	-.3134	-.3410	-.3185	-.1818	.5557		-.3743	-.2049	-.0568	-.0322	-.0946
120.000			.3572	-.0634	-.3182	-.3627	-.3593	-.1565	.0602	-.0435	-.2130	-.1174	-.0738	-.0416	-.1000
135.000								-.0991		.1127		-.2842		-.0573	
150.000			.3765	-.0553	-.3154	-.3591	-.4224	-.1108	.0015	.1906	.0216	-.3851	-.1940	-.1126	-.1203
165.000				-.0291	-.2978	-.3515	-.4185	-.1352	.0300	.1529	.1953	-.1834	-.2100	-.0873	-.1281
180.000	1.1690	.7349	.4527	.0016	-.2766	-.3316	-.4008	-.3279	.0078	.1376	.1824	-.1779	-.2684	-.2013	-.1279
270.000		1.2440							.5882						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0392	-.0383	-.0403
30.000	-.0368	-.0137	.0193
60.000	-.0085	.0226	.1242
90.000	-.0022	.1120	
120.000	.0465	.1457	.2270
135.000	.0364	.1478	.1401
150.000	.0239	.1099	.0100
165.000	.0247	.1325	.2792
180.000	-.0054	.1102	.2608

ALPHAO(10) = 7.910 BETAO (1) = -10.030

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1450	1.1180	.7612	.2921	-.0579	-.1279	-.2112	-.1852	.0235	-.0412	-.0121	-.0150	-.0723	-.0825	-.0843
30.000			.9063	.4237	.0508	-.0260	-.1167	-.0826	.2509	.0799	-.1955	-.0067	.0232	.0103	.0018
60.000			.9439	.4606	.0787	.0039	-.1004	-.0310	.5056	.0387	-.1228	-.0626	.0627	.0658	.0648
90.000		1.2210	.8553	.3797	.0119	-.0637	-.1336	.2519	.5555		-.3107	-.1602	-.0075	.0697	.1125
120.000			.6837	.2233	-.1103	-.1812	-.2618	-.1520	.0594	-.2422	-.3250	-.2212	.0088	.1167	.1412
135.000								-.2797		-.3068		-.1805		.1533	
150.000			.5407	.0868	-.2179	-.2759	-.3551	-.3116	-.1061	-.2875	.0286	-.1156	-.0895	.0558	.0334
165.000				.0119	-.2808	-.3340	-.4017	-.3569	-.1580	.1684	.2676	.1719	-.2168	.0103	.0738
180.000	1.1450	.8419	.4049	-.0240	-.3050	-.3539	-.3960	-.3593	-.0044	.3094	.4280	-.2017	-.4064	-.0809	.0163
270.000		.7419							.4435						

X/LT	.7460	.8530	.9290
PHI			

ARC11-716 IA14 O6+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(10) = 7.910 BETAO (1) = -10.030

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0383	-.0245	-.0090
30.000	.0501	.0865	.0671
60.000	.1066	.2092	.1468
90.000	.1616	.1583	
120.000	.2060	.2380	.7347
135.000	.2416	.4145	6071
150.000	.2100	.4036	.6755
165.000	.1991	.3824	.7316
180.000	.1637	.3174	.5162

ALPHAO(10) = 7.930 BETAO (2) = -8.030

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1810	1.1570	.7882	.3107	-.0422	-.1135	-.1970	-.1710	-.0651	.1606	.0362	-.0482	-.0634	-.0636	-.0647
30.000			.8925	.4070	.0367	-.0412	-.1285	-.0957	.2694	.1101	-.1079	.0001	.0166	.0040	.0034
60.000			.8989	.4132	.0434	-.0315	-.1348	-.0874	.5047	.0533	-.1437	-.0208	.0461	.0494	.0383
90.000		1.1750	.7995	.3246	-.0315	-.1038	-.1845	.0894	.5395		-.3521	-.1524	-.0146	.0600	.0933
120.000			.6455	.1013	-.1417	-.2102	-.2870	-.2163	.0473	-.2444	-.3430	-.2367	-.0051	.1026	.1204
135.000								-.3028		-.2899		-.2145		.1188	
150.000			.5273	.0778	-.2283	-.2879	-.3637	-.3169	.0920	-.1575	.0749	-.1706	-.1317	.0262	.0620
165.000				.0160	-.2721	-.3291	-.3959	-.3429	-.0800	.2549	.3336	.1406	-.2711	-.0406	.0646
180.000	1.1810	.8562	.4168	-.0151	-.2927	-.3405	-.3929	-.3460	.0404	.3111	.4350	-.2244	-.3317	-.0858	.0409
270.000		.7951							.5325						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0554	.0510	.0370
30.000	.0140	.0961	.0940
60.000	.0662	.1720	.1380
90.000	.1335	.1255	
120.000	.1697	.2026	.7299
135.000	.2019	.3871	.5761
150.000	.1842	.3[illegible]	.6372
165.000	.1917	.3764	.7067
180.000	.1731	.3254	.4913

ARC11-716 IA14 OL+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(10) = 7.810 BETAO (3) = -5.970

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2070	1.1880	.8065	.3227	-.0333	-.1054	-.1899	-.1600	-.1072	.2329	.0778	-.0440	-.0539	-.0399	-.0434
30.000			.8742	.3837	.0168	-.0598	-.1461	-.1132	.2684	.1467	-.0639	-.0015	.0104	-.0025	-.0004
60.000			.8502	.3641	.0004	-.0692	-.1685	-.1308	.4902	.0685	-.1513	.0037	.0357	.0271	.0122
90.000		1.1390	.7467	.2730	-.0730	-.1433	-.2249	-.0286	.5300		-.3594	-.1505	-.0046	.0353	.0422
120.000			.6077	.1476	-.1703	-.2344	-.3072	-.2567	.0496	-.2778	-.3467	-.2491	.0127	.1011	.0941
135.000								-.3095		-.2611		-.2486		.1021	
150.000			.5127	.0672	-.2357	-.2960	-.3682	-.3196	-.0667	.0406	.1124	-.2298	-.1625	.0236	.0419
165.000				.0124	-.2718	-.3268	-.3876	-.3307	.0775	.2939	.3450	.0949	-.3058	-.0188	.0561
180.000	1.2070	.8556	.4303	-.0093	-.2866	-.3350	-.3856	-.3168	.0458	.2802	.4180	-.2204	-.3522	-.0203	.0226
270.000		.8902							.5303						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0244	.0229	.0623
30.000	.0122	.0810	.0685
60.000	.0487	.1454	.0973
90.000	.0840	.0784	
120.000	.1308	.1998	.6991
135.000	.1528	.3658	.5456
150.000	.1480	.3700	.5940
165.000	.1641	.3679	.6313
180.000	.1517	.3210	.4617

ALPHAO(10) = 7.830 BETAO (4) = -4.000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2250	1.2080	.8193	.3305	-.0246	-.0968	-.1826	-.1526	-.0981	.2693	.1137	-.0408	-.0460	-.0288	-.0218
30.000			.8484	.3596	-.0031	-.0778	-.1622	-.1309	.2149	.1890	-.0267	-.0091	.0087	-.0050	-.0035
60.000			.8018	.3176	-.0358	-.1057	-.1999	-.1635	.4470	.0825	-.1464	.0190	.0337	.0188	-.0037
90.000		1.0880	.5975	.2254	-.1083	-.1778	-.2586	-.1177	.5207		-.3616	-.1313	-.0071	.0162	.0058
120.000			.5775	.1201	-.1943	-.2541	-.3246	-.2842	.0584	-.2977	-.3623	-.2521	.0043	.0874	.0688
135.000								-.3096		-.1310		-.2980		.0874	
150.000			.5007	.0511	-.2470	-.3004	-.3698	-.3165	.0017	.0925	.0961	-.2617	-.2051	.0262	.0234
165.000				.0130	-.2701	-.3240	-.3809	-.3222	.1204	.2778	.3371	.0384	-.3262	-.0011	.0510
180.000	1.2250	.8610	.4376	-.0046	-.2770	-.3296	-.3866	-.1839	.0210	.2228	.3967	-.1754	-.3468	-.0115	.0107
270.000		.9030							.5355						

X/LT	.7480	.8530	.9280
PHI			

ASC11-7:6 IA14 3I+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(10) = 7.830 BETAO (4) = -4.000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L	.7480	.8530	.9280
PHI			
.000	.0033	.0437	.0634
30.000	.0195	.0774	.0707
60.000	.0322	.1255	.0808
90.000	.0505	.0536	
120.000	.1001	.2343	.6230
135.000	.1215	.3480	.4912
150.000	.1154	.3485	.5204
165.000	.1398	.3467	.5763
180.000	.1336	.3018	.4357

ALPHAO(10) = 7.830 BETAO (5) = -2.030

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L	.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2375	1.2230	.8274	.3369	-.0202	-.0915	-.1375	-.1479	-.0940	.3102	.1368	-.0419	-.0484	-.0118	-.0065
30.000			.8223	.3362	-.0230	-.0954	-.1390	-.1465	.1443	.2431	.0034	-.0377	-.0051	-.0017	-.0055
60.000			.7545	.2713	-.0711	-.1376	-.2031	-.1693	-.1189	.1059	-.1407	.0007	.0339	.0122	-.0104
90.000		1.0447	.6501	.1574	-.1434	-.2090	-.2688	-.0782	.5478		-.3558	-.1102	.0058	.0079	-.0257
120.000			.5462	.0	-.1	-.2	-.2	-.2	-.2	-.2	-.2	-.2	-.2	-.2	-.2
135.000								-.3		-.2	-.2	-.2	-.2	-.2	-.2
150.000											-.2	-.2	-.2	-.2	-.2
165.000															
180.000	1.2375	.8619													
270.000															

X/L	.748	.853	.928
PHI			
30.000			
60.000			
90.000			
120.000			
135.000			
150.000			
165.000			
180.000			

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(10) = 7.840 BETAO (6) = .040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2470	1.2270	.8294	.3383	-.0167	-.0913	-.1760	-.1442	-.0912	.3494	.1458	-.0440	-.0532	-.0035	.0057
30.000			.7911	.3038	-.0455	-.1170	-.1984	-.1677	.0310	.2797	.0279	-.0521	-.0417	-.0201	-.0028
60.000			.7051	.2237	-.1083	-.1740	-.2603	-.1969	.4545	.1260	-.1183	-.0375	-.0017	-.0074	-.0048
90.000		1.0010	.5978	.1365	-.1755	-.2429	-.3157	-.1957	.5151		-.3434	-.1175	.0192	.0161	-.0048
120.000			.5102	.0613	-.2360	-.2930	-.3565	-.2991	.0950	-.2007	-.3517	-.2489	-.0250	.0414	.0125
135.000								-.3146		-.0490		-.3206		.0463	
150.000			.4696	.0193	-.2597	-.3119	-.3741	-.3198	.1306	.1722	.1151	-.2700	-.2207	.0143	-.0369
165.000				.0124	-.2704	-.3185	-.3819	-.2906	.0530	.1992	.3130	-.0268	-.2194	.0091	.0137
180.000	1.2470	.8611	.4443	.0017	-.2681	-.3220	-.3811	-.1803	.0553	.1949	.3517	.0127	-.2187	.0119	.0238
270.000		1.0060							.5315						

X/LT	.7460	.8530	.9280
PHI			
.000	.0207	.0560	.0901
30.000	.0212	.0692	.0793
60.000	.0295	.0894	.0803
90.000	.0522	.0715	
120.000	.0984	.2205	.3568
135.000	.0968	.2619	.2909
150.000	.0777	.2490	.2916
165.000	.1163	.2650	.3886
180.000	.1227	.2598	.3359

ALPHAO(10) = 7.830 BETAO (7) = 2.040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2420	1.2190	.8236	.3345	-.0221	-.0949	-.1774	-.1463	-.0975	.3525	.1407	-.0430	-.0561	-.0036	-.0085
30.000			.7543	.2688	-.0722	-.1424	-.2206	-.1930	-.1198	.3191	.0342	-.0749	-.0718	-.0404	-.0322
60.000			.6482	.1752	-.1473	-.2099	-.2914	-.2210	.4206	.1529	-.0961	-.0566	-.0474	-.0270	-.0085
90.000		.9472	.5466	.0947	-.2147	-.2735	-.3326	-.2099	.5187		-.3490	-.2879	.0071	-.0064	-.0012
120.000			.4757	.0300	-.2569	-.3110	-.3552	-.3209	.1277	-.1668	-.3325	-.2470	-.0249	.0299	.0037
135.000								-.3277		.0428		-.3287		.0288	
150.000			.4493	.0073	-.2707	-.3213	-.3799	-.3267	.1171	.2388	.1083	-.2693	-.2148	-.0093	-.0374
165.000				.0005	-.2750	-.3220	-.3840	-.3365	.0832	.2438	.2803	-.0600	-.2177	.0065	.0190
180.000	1.2420	.8567	.4423	.0015	-.2737	-.3228	-.3835	-.2462	.0565	.2109	.3588	.0001	-.2242	.0053	.0237
270.000		1.0530							.5310						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1733)

ALPHAO(10) = 7.830 BETAO (7) = 2.040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0091	.0515	.0835
30.000	.0089	.0528	.0900
60.000	.0348	.0798	.1214
90.000	.0789	.1458	
120.000	.1032	.1915	.2692
135.000	.1011	.2224	.1996
150.000	.0892	.2139	.2069
165.000	.1170	.2424	.3785
180.000	.1198	.2578	.3175

ALPHAO(10) = 7.870 BETAO (8) = 4.060

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2310	1.2070	.8159	.3270	-.0272	-.0988	-.1826	-.1544	-.1003	.2993	.1201	-.0407	-.0525	-.0202	-.0283
30.000			.7159	.2372	-.0962	-.1672	-.2439	-.2182	-.1591	.3240	.0390	-.0884	-.0842	-.0653	-.0528
60.000			.5994	.1326	-.1818	-.2426	-.3225	-.2538	.3579	.1837	-.0781	-.0564	-.0761	-.0386	-.0150
90.000		.9005	.4935	.0505	-.2451	-.3026	-.3402	-.2826	.5209		-.3588	-.3784	-.0059	-.0150	-.0046
120.000			.4404	-.0037	-.2771	-.3287	-.3449	-.3267	.1792	-.1727	-.3305	-.2292	-.0378	.0144	-.0038
135.000								-.3373		.1054		-.3107		-.0002	
150.000			.4265	-.0131	-.2877	-.3307	-.3467	-.3271	.0508	.2416	.0836	-.2147	-.1954	-.0359	-.0685
165.000				-.0373	-.3215	-.3287	-.3930	-.3479	.0553	.2406	2591	-.0779	-.2069	.0037	.0312
180.000	1.2310	.8593	.4404	-.0437	-.3268	-.3274	-.3920	-.3348	.0113	.1813	.0181	.0184	-.2081	.0037	.0211
270.000		1.1120							.5224						

X/LT	.7460	.8530	.9280
PHI			
.000	.0011	.0410	.0691
30.000	.0014	.0397	.0779
60.000	.0291	.0652	.1227
90.000	.0792	.1279	
120.000	.1000	.1739	.2233
135.000	.0956	.1827	.1441
150.000	.0826	.1673	.0847
165.000	.0994	.2020	.2186
180.000	.1034	.2144	.2304

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(10) = 7.970 BETAO (9) = 6.160

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2080	1.1920	.8102	.3273	-.0244	-.1014	-.1836	-.1570	-.0838	.2039	.0985	-.0388	-.0569	-.0404	-.0405
30.000			.6773	.2071	-.1254	-.1917	-.2663	-.2423	-.1780	.3062	.0410	-.0998	-.0972	-.0867	-.0757
60.000			.5424	.0884	-.2175	-.2754	-.3490	-.2857	.2698	.2132	-.0469	-.0608	-.0920	-.0490	-.0266
90.000		.8459	.4467	.0078	-.2744	-.3272	-.3355	-.2133	.5309		-.3632	-.4089	-.0168	-.0395	-.0259
120.000			.4018	-.0290	-.2941	-.3431	-.3345	-.3013	.1170	-.1755	-.3299	-.2022	-.0522	-.0145	-.0210
135.000								-.2943		.1301		-.2930		-.0299	
150.000			.3966	-.0358	-.2946	-.3426	-.4043	-.2182	.0249	.2140	.0715	-.3414	-.1875	-.0609	-.0682
165.000				-.0241	-.2905	-.3408	-.4007	-.2821	.0410	.2306	.2585	-.0888	-.1891	-.0095	-.0173
180.000	1.2080	.8317	.4250	-.0180	-.2841	-.3346	-.3981	-.3366	.0376	.1562	.3166	-.1187	-.2226	-.0189	-.0322
270.000		1.1400							.5357						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0278	.0097	.0668
30.000	-.0194	.0221	.1021
60.000	.0174	.0621	.1483
90.000	.0687	.1397	
120.000	.0920	.1758	.2267
135.000	.0788	.1748	.1538
150.000	.0694	.1454	.0520
165.000	.0831	.1795	.2861
180.000	.0834	.1935	.3131

ALPHAO(10) = 7.960 BETAO (10) = 8.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1790	1.1580	.7876	.3101	-.0394	-.1120	-.1969	-.1668	-.0124	.0507	.0499	-.0353	-.0667	-.0628	-.0680
30.000			.6250	.1640	-.1559	-.2204	-.2923	-.2695	-.1803	.2490	.0308	-.1082	-.1067	-.1124	-.1044
60.000			.4823	.0406	-.2510	-.3070	-.3470	-.2944	.1900	.2020	-.0340	-.0803	-.0999	-.0636	-.0428
90.000		.7915	.3999	-.0358	-.2986	-.3466	-.3221	-.2332	.5224		-.3701	-.3941	-.0589	-.0735	-.0339
120.000			.3656	-.0612	-.3111	-.3539	-.3381	-.2303	.0525	-.1461	-.3103	-.1589	-.0819	-.0272	-.0254
135.000								-.1710		.1249		-.2948		-.0454	
150.000			.3700	-.0591	-.3096	-.3534	-.4133	-.1399	.0241	.1919	.0448	-.3745	-.2091	-.0888	-.0826
165.000				-.0448	-.3065	-.3534	-.4123	-.1508	.0282	.1823	.2325	-.1464	-.1877	-.0711	-.0480
180.000	1.1790	.7389	.4164	-.0287	-.2958	-.3473	-.4110	-.3527	.0393	.1461	.2229	-.1754	-.2151	-.0849	-.0628
270.000		1.1820							.5461						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(10) = 7.960 BETAO (10) = 8.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0631	.0483	.0460
30.000	-.0160	.0333	.0626
60.000	.0538	.0688	.1326
90.000	.0677	.1430	
120.000	.0871	.1754	.2429
135.000	.0729	.1817	.1645
150.000	.0564	.1508	.0556
165.000	.0800	.1713	.2968
180.000	.0636	.1760	.3012

ALPHAO(10) = 7.960 BETAO (11) = 10.230

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1470	1.1220	.7619	.2964	-.0479	-.1222	-.2097	-.1815	-.0014	-.0245	-.0128	-.0437	-.0749	-.0827	-.0736
30.000			.5767	.1255	-.1898	-.2510	-.3250	-.3037	.0712	.1934	.0121	-.1037	-.1189	-.1223	-.0444
60.000			.4324	-.0027	-.2889	-.3442	-.3355	-.2902	.0946	.1680	-.0245	-.0929	-.1344	-.0770	-.0182
90.000		.7396	.3568	-.0691	-.3278	-.3470	-.3279	-.2195	.4999		-.3686	-.3268	-.0704	-.0564	-.0880
120.000			.3324	-.0852	-.3329	-.3647	-.3539	-.1901	.0362	-.1110	-.2869	-.0943	-.0523	-.0274	-.0723
135.000								-.1155		.1081		-.3019		-.0428	
150.000			.3475	-.0793	-.3319	-.3739	-.4314	-.1243	-.0016	.1859	.0163	-.3802	-.1506	-.0929	-.0929
165.000				-.0648	-.3214	-.3718	-.4338	-.1299	.0163	.1359	.1763	-.1897	-.1121	-.0807	-.0969
180.000	1.1470	.6821	.4081	-.0382	-.3058	-.3606	-.4231	-.1584	.0144	.1132	.1581	-.1871	-.2180	-.1734	-.1063
270.000		1.2250							.5616						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0436	-.0339	-.0044
30.000	-.0532	-.0180	.0356
60.000	-.0084	.0406	.1163
90.000	.0179	.1228	
120.000	.0578	.1543	.2136
135.000	.0487	.1556	.1379
150.000	.0346	.1226	.0164
165.000	.0421	.1395	.2748
180.000	.0143	.1140	.2568

ARC11-716 IA14 D1+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(11) = 9.890 BETAO (1) = -9.960

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1140	1.1530	.8119	.3425	-.0165	-.0885	-.1727	-.1461	.0682	-.0079	.0191	.0053	-.0282	-.0412	-.0416
30.000			.9551	.4748	.0935	.0145	-.0778	-.0431	.3079	.1236	-.1382	.0443	.0642	.0446	.0423
60.000			.9661	.4839	.1051	.0277	-.0809	.0158	.5433	.0826	-.0985	.0107	.0880	.0913	.0924
90.000		1.1880	.8379	.3695	.0042	-.0707	-.1316	.2984	.5232		-.3092	-.1324	-.0232	.0493	.1259
120.000			.6368	.1844	-.1432	-.2078	-.2861	-.1018	-.0198	-.1833	-.3462	-.2450	-.0412	.0640	.1112
135.000								-.3159		-.2962		-.2066		.1398	
150.000			.4839	.0433	-.2484	-.3090	-.3837	-.3441	-.1742	-.2701	-.1298	-.1789	-.0673	.0738	.0978
165.000				-.0295	-.3110	-.3611	-.4235	-.3725	-.1705	.1195	.1995	.1668	-.1953	.0408	.1030
180.000	1.1140	.7877	.3605	-.0610	-.3265	-.3748	-.3922	-.3795	-.0279	.2653	.3889	-.2027	-.3988	-.0507	.0485
270.000		.7115							.3716						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0323	-.0141	.0128
30.000	.0761	.1062	.1000
60.000	.1357	.2074	.1717
90.000	.2082	.2397	
120.000	.2020	.2379	.6048
135.000	.2507	.4162	.5828
150.000	.2151	.3903	.6433
165.000	.2056	.3603	.7212
180.000	.1678	.2971	.5093

ALPHAO(11) = 9.930 BETAO (2) = -7.920

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1500	1.1920	.8348	.3599	.0009	-.0726	-.1585	-.1312	.0127	.1515	.0683	-.0064	-.0090	-.0235	-.0366
30.000			.9374	.4546	.0789	.0004	-.0908	-.0560	.3163	.1500	-.0685	.0470	.0614	.0369	.0389
60.000			.9148	.4361	.0652	-.0104	-.1141	-.0697	.5362	.0985	-.1235	.0501	.0792	.0728	.0721
90.000		1.1460	.7808	.3151	-.0388	-.1111	-.1932	.1408	.5068		-.3224	-.1142	-.0183	.0492	.1058
120.000			.6020	.1456	-.1715	-.2352	-.3093	-.2005	-.0309	-.1972	-.3542	-.2536	-.0394	.0623	.0976
135.000								-.3274		-.2880		-.2056		.1108	
150.000			.4772	.0324	-.2598	-.3147	-.3894	-.3439	-.1490	-.1263	-.0100	-.2239	-.1043	.0477	.0755
165.000				-.0256	-.2997	-.3527	-.4098	-.3623	-.0904	.2183	.2631	.1300	-.2632	-.0025	.0814
180.000	1.1500	.7993	.3743	-.0495	-.3157	-.3596	-.3855	-.3659	.0134	.2935	.4043	-.2291	-.3255	-.0431	.0533
270.000		.7648							.4912						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(11) = 9.930 BETAO (2) = -7.920

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0447	.0797	.0631
30.000	.0433	.0913	.1192
60.000	.0917	.1686	.1433
90.000	.1687	.1712	
120.000	.1744	.2156	.6141
135.000	.2143	.3944	.5627
150.000	.1975	.3766	.6149
165.000	.2014	.3660	.6885
180.000	.1820	.3133	.4833

ALPHAO(11) = 9.940 BETAO (3) = -6.010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6580
PHI															
.000	1.1730	1.2270	.8591	.3755	.0068	-.0643	-.1506	-.1224	-.0640	.2422	.1042	-.0092	.0003	-.0030	-.0128
30.000			.9203	.4344	.0589	-.0203	-.1100	-.0766	.3185	.1792	-.0185	.0352	.0455	.0349	.0310
60.000			.8681	.3889	.0224	-.0503	-.1503	-.1126	.5169	.1140	-.1248	.0553	.0651	.0615	.0537
90.000		1.0950	.7275	.2650	-.0813	-.1484	-.2345	.0312	.4960		-.3249	-.0900	-.0077	.0922	.0811
120.000			.5632	.1128	-.1979	-.2564	-.3311	-.2629	-.0330	-.2033	-.3583	-.2506	-.0477	.0646	.0816
135.000								-.3322		-.2512		-.2629		.0852	
150.000			.4574	.0217	-.2662	-.3248	-.3947	-.3441	-.1227	.0444	.0220	-.2566	-.1296	.0253	.0493
165.000				-.0299	-.3008	-.3521	-.3944	-.3557	.0269	.2728	.2857	.0886	-.2845	-.0126	.0697
180.000	1.1730	.7993	.3601	-.0472	-.3120	-.3547	-.3867	-.3396	.0780	.2672	.3909	-.2172	-.3432	-.0036	.0362
270.000		.8173							.4580						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0234	.0387	.0698
30.000	.0398	.0913	.0843
60.000	.0758	.1406	.0990
90.000	.1180	.0815	
120.000	.1466	.2095	.6330
135.000	.1740	.3726	.5354
150.000	.1636	.3649	.5821
165.000	.1755	.3615	.6268
180.000	.1621	.3184	.4496

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(11) = 9.690 BETAO (4) = -3.990

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6180
PHI															
.000	1.1940	1.2410	.8644	.3802	.0116	-.0587	-.1471	-.1201	-.0673	.2928	.1396	-.0066	-.0134	.0019	-.0030
30.000			.8906	.4018	.0321	-.0444	-.1301	-.0986	.2835	.2211	.0111	.0191	.0274	.0199	.0166
60.000			.8201	.3386	-.0188	-.0875	-.1854	-.1368	.5161	.1228	-.1204	.0251	.0439	.0390	.0372
90.000		1.0580	.6833	.2164	-.1181	-.1837	-.2663	-.0420	.4932		-.3253	-.1387	-.0469	.0336	.0506
120.000			.5384	.0898	-.2170	-.2762	-.3435	-.2983	-.0167	-.2002	-.3493	-.2586	-.0240	.0643	.0697
135.000								-.3361		-.1037		-.3162		.0689	
150.000			.4546	.0178	-.2695	-.3247	-.3916	-.3366	-.0467	.1264	.0382	-.2857	-.1606	.0194	.0274
165.000				-.0233	-.2937	-.3455	-.3761	-.3474	.0800	.2608	.3018	.0302	-.3060	.0014	.0646
180.000	1.1940	.8096	.3952	-.0381	-.2955	-.3483	-.3975	-.1598	.0067	.2201	.3655	-.1705	-.3383	-.0097	.0225
270.000		.8682							.4953						
X/LT	.7460	.8530	.9280												
PHI															
.000	-.0025	.0528	.0925												
30.000	.0465	.0912	.1091												
60.000	.0669	.1289	.1184												
90.000	.0901	.1135													
120.000	.1195	.2206	.5804												
135.000	.1371	.3379	.4750												
150.000	.1227	.3399	.4993												
165.000	.1481	.3415	.5613												
180.000	.1413	.2989	.4350												

ALPHAO(11) = 9.900 BETAO (5) = -1.980

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2080	1.2560	.8771	.3877	.0221	-.0538	-.1417	-.1114	-.0622	.3319	.1637	-.0010	.0001	.0074	.0080
30.000			.8661	.3769	.0121	-.0642	-.1478	-.1176	.1721	.2772	.0407	.0050	.0077	.0061	.0055
60.000			.7678	.2893	-.0592	-.1275	-.2173	-.1430	.5295	.1402	-.0993	.0148	.0015	.0157	.0184
90.000		1.0140	.6297	.1669	-.1573	-.2195	-.2990	-.0100	.4877		-.3316	-.3095	-.1199	-.0136	.0334
120.000			.5042	.0599	-.2376	-.2963	-.3604	-.3155	-.0066	-.1517	-.3355	-.2824	-.0375	.0507	.0472
135.000								-.3404		-.0170		-.3578		.0716	
150.000			.4395	-.0017	-.2790	-.3313	-.3824	-.3331	.0651	.1801	.0363	-.3011	-.1766	.0368	.0113
165.000				-.0236	-.2933	-.3446	-.3736	-.3306	.0640	.2277	.2930	-.0303	-.2470	.0233	.0433
180.000	1.2080	.8078	.3959	-.0363	-.2935	-.3430	-.4000	-.0880	.0220	.1864	.3591	-.0895	-.2272	.0231	.0327
270.000		.9189							.4866						
X/LT	.7460	.8530	.9280												
PHI															

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(11) = 9.900 BETAO (5) = -1.980

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0128	.0613	.1129
30.000	.0299	.0766	.1384
60.000	.0472	.1112	.1692
90.000	.0877	.2029	
120.000	.1053	.2200	.4214
135.000	.1182	.2787	.3540
150.000	.0998	.2769	.3515
165.000	.1327	.2872	.5057
180.000	.1252	.2475	.4057

ALPHAO(11) = 9.910 BETAO (6) = .020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2130	1.2590	.8776	.3887	.0238	-.0530	-.1393	-.1094	-.0606	.3706	.1716	-.0007	-.0005	.0225	.0106
30.000			.8305	.3442	-.0124	-.0845	-.1695	-.1407	.0075	.3110	.0603	-.0108	-.0108	-.0136	-.0074
60.000			.7128	.2379	-.0972	-.1626	-.2520	-.1843	.5039	.1655	-.0792	.0111	-.0224	.0037	.0024
90.000		.9643	.5777	.1218	-.1903	-.2532	-.3267	-.0684	.4827		-.3383	-.3558	-.0828	-.0146	.0166
120.000			.4706	.0309	-.2591	-.3129	-.3672	-.3290	.0119	-.0875	-.3406	-.2738	-.0294	.0385	.0315
135.000								-.3323		.0147		-.3639		.0563	
150.000			.4230	-.0134	-.2862	-.3342	-.3685	-.3292	.0918	.2134	.0619	-.2858	-.1834	.0202	-.0041
165.000				-.0269	-.2885	-.3395	-.3987	-.2517	.0263	.2116	.2971	-.0438	-.2079	.0238	.0429
180.000	1.2130	.8050	.3972	-.0340	-.2895	-.3413	-.3972	-.1239	.0320	.1948	.3360	-.0095	-.2172	.0305	.0514
270.000		.9737							.4870						

X/LT	.7460	.8530	.9280
PHI			
.000	.0096	.0605	.1116
30.000	.0148	.0680	.1251
60.000	.0388	.0982	.1612
90.000	.0891	.1785	
120.000	.1030	.1961	.3162
135.000	.1133	.2475	.2547
150.000	.0918	.2330	.2738
165.000	.1315	.2526	.3949
180.000	.1359	.2485	.3091

ARC11-716 IA14 O1+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(11) = 9.900 BETAO (7) = 2.040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2090	1.2550	.8726	.3853	.0175	-.0579	-.1435	-.1126	-.0661	.3619	.1618	-.0071	-.0025	.0130	.0088
30.000			.7892	.3094	-.0427	-.1161	-.1971	-.1679	-.1142	.3371	.0612	-.0362	-.0287	-.0271	-.0294
60.000			.6559	.1877	-.1389	-.2047	-.2884	-.2173	.4530	.1919	-.0563	-.0033	-.0375	-.0059	-.0188
90.000		.9138	.5274	.0796	-.2271	-.2850	-.3564	-.0919	.4817		-.3401	-.3954	-.0318	-.0201	.0021
120.000			.4389	.0013	-.2789	-.3304	-.3740	-.3388	.0297	-.0662	-.3503	-.2637	-.0347	.0305	.0199
135.000								-.3460		.0960		-.3725		.0467	
150.000			.4062	-.0289	-.2941	-.3416	-.3807	-.3450	.1022	.2582	.0601	-.2817	-.1982	.0034	-.0095
165.000				-.0330	-.2956	-.3424	-.4006	-.3354	.0650	.2409	.2590	-.0819	-.1961	.0248	.0418
180.000	1.2090	.8039	.3964	-.0363	-.2954	-.3421	-.4021	-.1873	.0400	.2072	.3351	-.0446	-.2272	.0240	.0496
270.000		1.0200							.4963						

X/LT	.7460	.8530	.9280
PHI			
.000	.0047	.0603	.1109
30.000	.0001	.0577	.1063
60.000	.0385	.0879	.142
90.000	.0877	.1556	
120.000	.1011	.1776	.2721
135.000	.1060	.2158	.1910
150.000	.0913	.2049	.1974
165.000	.1231	.2303	.3504
180.000	.1287	.2365	.2953

ALPHAO(11) = 9.900 BETAO (8) = 4.130

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2010	1.2430	.8616	.3797	.0112	-.0619	-.1510	-.1178	-.0668	.3149	.1459	-.0075	-.0096	.0047	-.0116
30.000			.7866	.2737	-.0709	-.1414	-.2213	-.1961	-.1484	.3375	.0639	-.0488	-.0492	-.0344	-.0497
60.000			.6041	.1414	-.1755	-.2373	-.3186	-.2486	.3790	.2169	-.0247	-.0183	-.0570	-.0177	-.0222
90.000		.8748	.4826	.0384	-.2565	-.3142	-.3765	-.1367	.4764		-.3359	-.4192	-.0351	-.0212	-.0034
120.000			.4081	-.0247	-.2943	-.3449	-.3615	-.3378	.0822	-.0433	-.3520	-.2445	-.0417	.0240	.0143
135.000								-.3466		.1394		-.3548		.0170	
150.000			.3881	-.0439	-.3040	-.3498	-.3891	-.3391	.0667	.2582	.0670	-.3170	-.1834	-.0186	-.0494
165.000				-.0407	-.3045	-.3495	-.4067	-.3148	.0386	.2590	.2533	-.0975	-.1944	.0173	.0478
180.000	1.2010	.8076	.3960	-.0397	-.3014	-.3505	-.4075	-.2696	.0260	.1858	.3512	-.0036	-.2277	.0191	.0409
270.000		1.0710							.4986						

X/LT	.7460	.8530	9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHA0(11) = 9.900 BETA0 (8 = 4.130

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0033	.0501	.1016
30.000	-.0084	.0434	.0967
60.000	.0357	.0793	.1331
90.000	.0886	.1379	
120.000	.1015	.1697	.2279
135.000	.0994	.1844	.1408
150.000	.0852	.1804	.0964
165.000	.1080	.1997	.2072
180.000	.1126	.2108	.2054

ALPHA0(11) = 9.880 BETA0 (9) = 6.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0090	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6360
PHI															
.000	1.1760	1.2220	.8514	.3708	.0076	-.0681	-.1553	-.1259	-.0487	.2372	.1173	-.0081	-.0132	-.0071	-.0280
30.000			.7026	.2362	-.1018	-.1720	-.2498	-.2264	-.1714	.3150	.0601	-.0637	-.0667	-.0740	-.0698
60.000			.5439	.0911	-.2129	-.2757	-.3525	-.2827	.2994	.2277	-.0159	-.0356	-.0672	-.0245	-.0316
90.000		.8125	.4300	-.0041	-.2899	-.3436	-.3682	-.1902	.4762		-.3361	-.4269	-.0680	-.0474	-.0272
120.000			.3729	-.0529	-.3153	-.3624	-.3483	-.2988	.0848	-.0324	-.3658	-.1984	-.0588	.0017	-.0004
135.000								-.2784		.1517		-.3245		-.0151	
150.000			.3616	-.0535	-.3153	-.3611	-.4083	-.2032	.0277	.2163	.0591	-.3430	-.1847	-.0506	-.0423
165.000				-.0568	-.3151	-.3611	-.4173	-.1763	.0233	.2343	.2453	-.1143	-.1545	-.0042	.0008
180.000	1.1760	.7750	.3821	-.0530	-.3110	-.3598	-.4191	-.3223	.0316	.1608	.2868	-.1393	-.1662	-.0161	-.0105
270.000		1.1080							.0044						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0200	.0307	.0844
30.000	-.0353	.0261	.1113
60.000	.0220	.0868	.1532
90.000	.0772	.1471	
120.000	.1019	.1753	.2305
135.000	.0903	.1768	.1514
150.000	.0822	.1502	.0549
165.000	.1054	.1796	.2635
180.000	.0956	.1915	.2845

ARC1[illegible]716 IA14 OL+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAO(11) = 9.870 BETAO (10) = 8.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1530	1.1910	.8309	.3568	-.0012	-.0772	-.1537	-.1329	.0374	.0353	.0734	-.0059	-.0255	-.0225	-.0422
30.000			.6525	.1907	-.1345	-.2018	-.2758	-.2545	-.1929	.2634	.0528	-.0753	-.0770	-.0921	-.0933
60.000			.4854	.0451	-.2526	-.3091	-.3611	-.2925	.2223	.2143	-.0127	-.0508	-.0715	-.0397	-.0406
90.000		.7623	.3823	-.0416	-.3147	-.3635	-.3356	-.2184	.4802		-.3458	-.3882	-.1082	-.0725	-.0305
120.000			.3404	-.0748	-.3289	-.3647	-.3405	-.2373	.0287	-.2168	-.3721	-.1121	-.0707	-.0119	-.0094
135.000								-.1919		.1254		-.3139		-.0212	
150.000			.3422	-.0740	-.3294	-.3722	-.4244	-.1206	.0095	.1891	.0316	-.3710	-.1963	-.0658	-.0687
165.000				-.0718	-.3289	-.3725	-.4288	-.1374	.0116	.1812	.2191	-.1681	-.1463	-.0494	-.0166
180.000	1.1500	.8911	.3761	-.0652	-.3200	-.3679	-.4285	-.3253	.0413	.1237	.1921	-.1787	-.1434	-.0551	-.0334
270.000		1.1570							.5156						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0464	.0803	.0653
30.000	-.0900	.0364	.0738
60.000	.0584	.0742	.1358
90.000	.0780	.1475	
120.000	.1048	.1738	.2378
135.000	.0899	.1616	.1611
150.000	.0659	.1509	.0534
165.000	.0922	.1768	.2897
180.000	.0801	.1771	.2907

ALPHAO(11) = 10.000 BETAO (11) = 10.190

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1130	1.1590	.8071	.3434	-.0113	-.0838	-.1739	-.1456	.0398	-.0340	.0167	-.0019	-.0283	-.0430	-.0332
30.000			.5999	.1524	-.1655	-.2322	-.3050	-.2696	-.1200	.2085	.0463	-.0621	-.0841	-.0971	-.0878
60.000			.4281	-.0021	-.2866	-.3433	-.3286	-.2499	.1345	.1459	-.0181	-.0743	-.0795	-.0289	-.0287
90.000		.7071	.3344	-.0828	-.3401	-.3411	-.3306	-.2205	.4128		-.3715	-.2937	-.0748	-.0498	-.0588
120.000			.3097	-.1063	-.3447	-.3601	-.3528	-.1948	.0030	-.0009	-.3447	-.0793	-.0378	-.0215	-.0312
135.000								-.1244		.0944		-.2684		-.0280	
150.000			.3200	-.1058	-.3431	-.3844	-.4377	-.1275	.0004	.1752	-.0006	-.3520	-.1218	-.0728	-.0634
165.000				-.0933	-.3416	-.3875	-.4457	-.1406	.0050	.1303	.1619	-.1865	-.0966	-.0461	-.0608
180.000	1.1130	.8248	.3645	-.0737	-.3305	-.3819	-.4411	-.2970	.0030	.0942	.1236	-.2003	-.0321	-.1179	-.0709
270.000		1.1980							.5301						

X/LT	.7480	.8530	.9280
PHI			

APC11-716 IA14 D1+T12+S12N25+AT10 EXTERNAL TANK (RB1T33)

ALPHAD(11) = 10.000 BETAD (11) = 10.000

SECTION (11)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9290
PHI			
.000	-.0362	-.0192	.0196
30.000	-.0722	-.0171	.0452
60.000	-.0072	.0500	.1065
90.000	.0255	.1284	
120.000	.0785	.1552	.2276
135.000	.0639	.1529	.1368
150.000	.0425	.1189	.0119
165.000	.0569	.1409	.2699
180.000	.0306	.1133	.2495

ARC11-716 IA14 OH+T12+S12N25+AT11 EXTERNAL TANK (RB1T34) (14 FEB 74)

REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 29.5800 INCHES
LREF = 36.7090 INCHES YMRP = .0000 INCHES
BREF = 38.7090 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = .600 ELEVON = .000
RUDDER = .000 SPDBRK = .000

ALPHAT(1) = -8.360 BETAT (1) = -8.070

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.8352	.3915	-.0012	-.3831	-.4449	-.4055	-.2943	-.1868	-.1468	-.1701	-.1710	-.1415	-.1106	-.1005	-.0994
30.000			.0895	-.3212	-.4519	-.4364	-.3464	-.2564	-.2514	-.3047	-.2882	-.1814	-.1392	-.1347	-.1098
60.000			.2529	-.1818	-.3365	-.3305	-.2677	-.2187	-.3227	-.4084	-.6434	-.1202	-.0459	-.0588	-.0591
90.000		.8252	.4462	.0021	-.1698	-.1434	-.0328	.0890	.0878		-.7237	-.4629	-.2087	-.1496	-.1315
120.000			.5840	.1333	-.0744	-.0643	.0279	.1622	.2330	.0537	.0395	.0261	.0075	.0148	.0299
135.000								.1284		.1545		.0101		.0030	
150.000			.6082	.1542	-.0694	-.0690	-.0072	.1059	.1702	.2767	.1592	-.0772	-.1368	-.1259	-.0815
165.000				.1027	-.1148	-.1149	-.0402	.0576	.1412	.2443	.1269	-.1013	-.1293	-.1140	-.0459
180.000	.8352	.9005	.4848	.0385	-.1584	-.1514	-.0726	.0262	.1080	.1975	.0620	-.3059	-.1910	-.1692	-.1052
270.000		.4021							.1290						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0978	-.1556	-.5031
30.000	-.1209	-.1625	-.5299
60.000	-.0708	-.1038	-.2632
90.000	-.1752	-.2784	
120.000	.0293	-.1577	.0523
135.000	.0290	-.0614	.0027
150.000	-.0611	-.0972	-.1176
165.000	-.0290	-.0720	.0682
180.000	-.0719	-.1066	-.2563

ALPHAT(1) = -8.330 BETAT (2) = -4.040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.8947	.4428	.0374	-.3529	-.4116	-.3720	-.2526	-.1475	-.1187	-.1437	-.1489	-.1086	-.0790	-.0575	-.0634
30.000			.3806	-.3207	-.4216	-.3887	-.2875	-.1967	-.1840	-.2437	-.2590	-.1344	-.1009	-.0899	-.0808
60.000			.1845	-.2386	-.3584	-.3274	-.2528	-.1794	-.2891	-.4199	-.6568	-.1296	-.0482	-.0533	-.0553
90.000		.7348	.3415	-.0987	-.2297	-.1886	-.0649	.0732	.0910		-.6693	-.4620	-.2025	-.1311	-.1191
120.000			.4804	.0371	-.1353	-.1128	-.0119	.1254	.2175	.0287	-.0156	-.0321	-.0419	-.0323	-.0116
135.000								.1017		.1250		-.0432		-.0413	
150.000			.5516	.0944	-.1077	-.0990	-.0339	.0662	.1589	.2364	.0242	-.0366	-.1378	-.1373	-.0939

ASC11-716 IA14 OR+T12+S12N25+AT11 EXTERNAL TANK (RB1T34)

ALPHAT(1) = -8.330 BETAT (2) = -4.040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6360
PHI															
165.000				.0988	-.111)	-.1117	-.0342	.0678	.1506	.2448	.1013	-.1500	-.1396	-.1080	-.0493
180.000	.0947	.9281	.5232	.0651	-.1309	-.1243	-.0441	.0589	.1336	.2263	.0932	-.3033	-.1573	-.1251	-.0756
270.000		.5186							.0993						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0741	-.1275	-.4560
30.000	-.0852	-.1272	-.4721
60.000	-.0705	-.0896	-.2623
90.000	-.1192	-.1619	
120.000	-.0075	-.1864	.0241
135.000	-.0098	-.0842	-.0274
150.000	-.0803	-.1201	-.1405
165.000	-.0334	-.0790	.0677
180.000	-.0478	-.0993	-.2199

ALPHAT(1) = -8.310 BETAT (3) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6360
PHI															
.000	.9195	.4774	.0515	-.3454	-.3978	-.3537	-.2410	-.1338	-.1023	-.1279	-.1289	-.0987	-.0622	-.0494	-.0360
30.000			.0634	-.3296	-.3973	-.3596	-.2463	-.1452	-.1285	-.1931	-.2011	-.1232	-.0735	-.0729	-.0608
60.000			.1181	-.2882	-.3585	-.3132	-.2210	-.1377	-.2148	-.3613	-.6521	-.1373	-.0479	-.0570	-.0518
90.000		.6326	.2276	-.1947	-.2766	-.2196	-.0828	.0664	.0960		-.6611	-.4309	-.1778	-.1114	-.0827
120.000			.3586	-.0671	-.2023	-.1753	-.0577	.0926	.2036	.0184	-.0538	-.0906	-.0859	-.0569	-.0316
135.000								.0655		.0696		-.1051		-.0755	
150.000			.4737	.0214	-.1553	-.1465	-.0717	.0614	.1393	.1875	-.1340	-.2411	-.2381	-.1793	-.1492
165.000				.0717	-.1309	-.1237	-.0414	.0599	.1434	.2323	.0381	-.2049	-.1504	-.1111	-.0592
180.000	.9195	.9302	.5290	.0744	-.1303	-.1216	-.0314	.0635	.1515	.2302	.0997	-.3117	-.1552	-.1012	-.0502
270.000		.6285							.0878						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0544	-.1155	-.4527
30.000	-.0640	-.1095	-.4333
60.000	-.0598	-.0823	-.2668
90.000	-.0987	-.1164	
120.000	-.0346	-.1780	-.0992
135.000	-.0400	-.1052	-.0457
150.000	-.0987	-.1619	-.2234

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T34)

ALPHAT(1) = -8.310 BETAT (3) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
165.000	-.0512	-.0929	.0767
180.000	-.0398	-.0839	-.1634

ALPHAT(1) = -8.320 BETAT (4) = 4.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.8948	.4429	.0324	-.3551	-.4098	-.3720	-.2556	-.1484	-.1149	-.1405	-.1453	-.1076	-.0750	-.0634	-.0640
30.000			.0253	-.3578	-.3899	-.3450	-.2158	-.1166	-.0916	-.1561	-.1948	-.1103	-.0556	-.0461	-.0497
60.000			.0422	-.3379	-.3574	-.3031	-.1901	-.0934	-.1538	-.3165	-.6395	-.1124	-.0494	-.0488	-.0512
90.000		.5138	.1055	-.2838	-.3134	-.2445	-.0922	.0712	.1194		-.6551	-.3791	-.1451	-.0933	-.0706
120.000			.2333	-.1786	-.2765	-.2336	-.0990	.0586	.1945	.0016	-.0917	-.1277	-.1026	-.0852	-.0614
135.000								.0188		.0373		-.1579		-.1213	
150.000			.3674	-.0674	-.2278	-.2079	-.1237	.0102	.0996	.1150	-.2814	-.4308	-.3356	-.2451	-.1777
165.000				.0182	-.1709	-.1624	-.0803	.0253	.1114	.1869	-.0174	-.2408	-.1681	-.1234	-.0909
180.000	.8948	.9213	.5194	.0645	-.1357	-.1320	-.0490	.0497	.1399	.2041	.0870	-.2917	-.1660	-.1586	-.0882
270.000		.7335							.0785						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0718	-.1238	-.4471
30.000	-.0644	-.1128	-.4346
60.000	-.0605	-.0907	-.3071
90.000	-.0695	-.1033	
120.000	-.0653	-.1822	-.1087
135.000	-.0760	-.1441	-.2052
150.000	-.1789	-.2451	-.3363
165.000	-.0791	-.1370	-.0414
180.000	-.0809	-.1280	-.3017

AR211-716 IA14 01+T12+S12W25+AT11 EXTERNAL TANK (RB1T34)

ALPHAT(1) = -8.350 BETAT (5) = 8.150

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6360
PHI															
.000	.8323	.3784	-.0094	-.3835	-.4361	-.3939	-.2872	-.1614	-.1464	-.1685	-.1717	-.1372	-.1041	-.0978	-.0887
30.000			-.0349	-.3885	-.3915	-.3378	-.2101	-.1002	-.0725	-.1317	-.1780	-.1092	-.0587	-.0632	-.0726
60.000			-.0284	-.3820	-.3494	-.2875	-.1601	-.0584	-.1055	-.2705	-.6260	-.1119	-.0536	-.0548	-.0613
90.000		.3934	.0082	-.3574	-.3313	-.2481	-.0862	.0797	.1316		-.6341	-.3254	-.1216	-.0765	-.0574
120.000			.1063	-.2788	-.3313	-.2808	-.1390	.0357	.1777	-.0210	-.1217	-.1605	-.1396	-.1297	-.1097
135.000								-.0298		-.0153		-.2246		-.1783	
150.000			.2544	-.1679	-.2983	-.2691	-.1820	-.0512	.0472	.0329	-.3818	-.5167	-.4344	-.2973	-.2509
165.000				-.0468	-.2293	-.2150	-.1337	-.0277	.0575	.1086	-.1053	-.3150	-.2255	-.2199	-.1508
180.000	.8323	.8135	.4864	.0310	-.1648	-.1601	-.0732	.0156	.1025	.1494	.0470	-.2905	-.2774	-.2229	-.1580
270.000		.8214							.0753						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0987	-.1491	-.4850
30.000	-.0898	-.1360	-.4466
60.000	-.0672	-.0971	-.3340
90.000	-.0728	-.1200	
120.000	-.1157	-.2139	-.1309
135.000	-.1193	-.1637	-.2216
150.000	-.2451	-.2897	-.3387
165.000	-.1366	-.1770	-.0748
180.000	-.1637	-.2070	-.3263

ALPHAT(2) = -4.310 BETAT (1) = -8.130

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6360
PHI															
.000	.9059	.5177	.1165	-.3047	-.4076	-.3792	-.2790	-.1784	-.1417	-.1585	-.1467	-.1296	-.1114	-.0993	-.0992
30.000			.2242	-.2097	-.3752	-.3622	-.2769	-.1991	-.1953	-.2418	-.1956	-.1473	-.1265	-.1133	-.0971
60.000			.3668	-.0840	-.2624	-.2547	-.1772	-.1033	-.1989	-.4309	-.4054	-.0804	-.0463	-.0480	-.0516
90.000		.8930	.4956	.0407	-.1320	-.1017	.0097	.1429	.1996		-.2069	-.0019	-.0361	-.0397	-.0477
120.000			.5450	.0924	-.1007	-.0848	.0044	.1195	.1562	-.0261	.0317	.0378	.0026	-.0006	.0190
135.000								.0752		.1077		.0283		-.0159	
150.000			.5103	.0531	-.1408	-.1307	-.0668	.0477	.1080	.2400	.1078	-.0744	-.1464	-.1224	-.0749
165.000				-.0034	-.1884	-.1813	-.1003	.0051	.0900	.2095	.1122	-.0911	-.1321	-.1137	-.0407
180.000	.9059	.8159	.3752	-.0613	-.2285	-.2086	-.1161	-.0095	.0714	.1785	.0992	-.2968	-.1825	-.1608	-.0898
270.000		.4656							.2435						

X/LT	.7460	.8530	.9280
PHI			

ARC11-718 IA14 01+T12+S12N25+AT11 EXTERNAL TANK (RB1T34)

ALPHAT(8) = -4.310 BETAT (1) = -8.130

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.1026	-.1565	-.5162
30.000	-.0978	-.1360	-.4951
60.000	-.0624	-.0805	-.2520
90.000	-.0740	-.1523	
120.000	.0400	-.0873	.0585
135.000	.0471	-.0116	.0101
150.000	-.0262	-.0567	-.0860
165.000	.0065	-.0252	.0794
180.000	-.0312	-.0554	-.2402

ALPHAT(2) = -4.300 BETAT (2) = -4.060

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	.9689	.5710	.1534	-.2725	-.3779	-.3540	-.2474	-.1409	-.1081	-.1253	-.1102	-.0916	-.0716	-.0637	-.0574
30.000			.2040	-.2264	-.3628	-.3434	-.2431	-.1534	-.1442	-.1986	-.1546	-.1089	-.0958	-.0794	-.0690
60.000			.2948	-.1507	-.2869	-.2647	-.1738	-.0900	-.1688	-.4109	-.4093	-.1071	-.0595	-.0503	-.0482
90.000		.8029	.3842	-.0652	-.1943	-.1520	-.0193	.1325	.1999		-.1498	-.0189	-.0309	-.0461	-.0381
120.000			.4450	-.0069	-.1639	-.1362	-.0264	.0984	.1530	-.0496	.0018	-.0100	-.0404	-.0390	-.0189
135.000								.0616		.0829		-.0445		-.0470	
150.000			.4629	.0061	-.1736	-.1570	-.0797	.0444	.1127	.2132	.0547	-.0546	-.1527	-.1370	-.0904
165.000				-.0124	-.1946	-.1786	-.0865	.0226	.1127	.2181	.1031	-.1399	-.1375	-.1070	-.0409
180.000	.9689	.8420	.4080	-.0375	-.2074	-.1905	-.0903	.0223	.1094	.1986	.0910	-.2951	-.1509	-.1287	-.0652
270.000		.5843							.2191						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0673	-.1184	-.4806
30.000	-.0673	-.1086	-.4687
60.000	-.0483	-.0677	-.2590
90.000	-.0364	-.0650	
120.000	.0099	-.1193	.0273
135.000	.0117	-.0354	-.0082
150.000	-.0449	-.0677	-.1114
165.000	-.0019	-.0355	.0868
180.000	-.0194	-.0559	-.1947

(PC11-715 IA14 C1+T12+S12N25+AT11 EXTERNAL TANK (RB1T34)

ALPHAT(2) = -4.300 BETAT (3) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9926	.5914	.1571	-.2637	-.3690	-.3415	-.2338	-.1292	-.0936	-.1112	-.1012	-.0786	-.0594	-.0486	-.0423
30.000			.1677	-.2515	-.3602	-.3303	-.2214	-.1238	-.1052	-.1619	-.1354	-.0891	-.0695	-.0602	-.0534
60.000			.2117	-.2161	-.3071	-.2719	-.1697	-.0660	-.1294	-.3833	-.4014	-.1289	-.0685	-.0479	-.0429
90.000		.6995	.2704	-.1634	-.2429	-.1842	-.0416	.1256	.2071		-.1303	-.0157	-.0443	-.0489	-.0423
120.000			.3378	-.0967	-.2165	-.1805	-.0592	.0798	.1518	-.0593	-.0357	-.0534	-.0739	-.0647	-.0383
135.000								.0420		.0566		-.0891		-.0770	
150.000			.3948	-.0520	-.2097	-.1830	-.0997	.0310	.1065	.1688	-.1105	-.1809	-.2099	-.1798	-.1355
165.000				-.0282	-.2030	-.1806	-.0904	.0248	.1124	.2083	.0441	-.1929	-.1362	-.1224	-.0643
180.000	.9926	.8437	.4215	-.0294	-.1974	-.1833	-.0791	.0254	.1139	.2018	.0990	-.2985	-.1458	-.1057	-.0433
270.000		.7048							.2000						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0499	-.1067	-.4716
30.000	-.0493	-.0984	-.4513
60.000	-.0478	-.0655	-.2951
90.000	-.0308	-.0557	
120.000	-.0146	-.1363	-.0582
135.000	-.0176	-.0637	-.1162
150.000	-.0951	-.1192	-.2691
165.000	-.0255	-.0573	.0826
180.000	-.0190	-.0513	-.1547

ALPHAT(2) = -4.300 BETAT (4) = 4.070

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9688	.5659	.1451	-.2746	-.3802	-.3537	-.2493	-.1457	-.1078	-.1294	-.1182	-.0944	-.0735	-.0648	-.0568
30.000			.1201	-.2909	-.3694	-.3288	-.2160	-.1065	-.0838	-.1483	-.1323	-.0932	-.0651	-.0618	-.0530
60.000			.1239	-.2832	-.3257	-.2750	-.1561	-.0420	-.0820	-.3469	-.3534	-.1448	-.0853	-.0639	-.0485
90.000		.5810	.1538	-.2554	-.2816	-.2131	-.0527	.1273	.2233		-.1060	-.0249	-.0529	-.0640	-.0500
120.000			.2191	-.1932	-.2763	-.2224	-.0869	.0662	.1502	-.0714	-.0689	-.0872	-.1011	-.0852	-.0538
135.000								.0191		.0169		-.1311		-.1171	
150.000			.3050	-.1313	-.2599	-.2271	-.1350	-.0001	.0813	.1115	-.2449	-.3845	-.3290	-.2447	-.1575
165.000				-.0714	-.2368	-.2131	-.1178	-.0087	.0837	.1749	-.0208	-.2304	-.1580	-.1251	-.0845
180.000	.9688	.8419	.4126	-.0457	-.2107	-.1944	-.0979	.0076	.1044	.1794	.0839	-.2757	-.1631	-.1567	-.0848
270.000		.8015							.1896						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T34)

ALPHAT(2) = -4.300 BETAT (4) = 4.070

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0642	-.1207	-.4805
30.000	-.0556	-.1025	-.4458
60.000	-.0490	-.0760	-.3197
90.000	-.0407	-.0725	
120.000	-.0452	-.1406	-.1003
135.000	-.0580	-.0951	-.1726
150.000	-.1481	-.1909	-.2858
165.000	-.0540	-.0905	-.0016
180.000	-.0519	-.0911	-.2644

ALPHAT(2) = -4.300 BETAT (5) = 8.130

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	.9021	.5010	.0998	-.3039	-.4136	-.3833	-.2846	-.1814	-.1480	-.1646	-.1486	-.1270	-.1121	-.1006	-.0991
30.000			.0377	-.3407	-.3850	-.3404	-.2181	-.1044	-.0788	-.1398	-.1316	-.0995	-.0786	-.0729	-.0702
60.000			.0300	-.3436	-.3294	-.2706	-.1368	-.0174	-.0432	-.3129	-.3176	-.1533	-.0920	-.0708	-.0625
90.000		.4609	.0438	-.3229	-.2973	-.2154	-.0462	.1315	.2426		-.0760	-.0279	-.0610	-.0807	-.0783
120.000			.1056	-.2820	-.3139	-.2508	-.1104	.0514	.1470	-.0809	-.1053	-.1243	-.1322	-.1266	-.1097
135.000								-.0129		-.0205		-.1953		-.1686	
150.000			.2019	-.2183	-.3101	-.2770	-.1728	-.0390	.0505	.0390	-.3486	-.4723	-.4055	-.2783	-.2274
165.000				-.1286	-.2821	-.2546	-.1603	-.0479	.0413	.0953	-.0993	-.2819	-.2213	-.2106	-.1359
180.000	.9021	.7397	.3753	-.0751	-.2400	-.2192	-.1232	-.0266	.0730	.1216	.0427	-.2741	-.2759	-.2241	-.1532
270.000		.8918							.1910						

X/LT	.7460	.8530	.9280
PHI			
.000	-.1053	-.1569	-.5083
30.000	-.0788	-.1165	-.4224
60.000	-.0624	-.0852	-.3092
90.000	-.0806	-.1313	
120.000	-.0877	-.1650	-.1365
135.000	-.0916	-.1194	-.1903
150.000	-.2036	-.2283	-.3059
165.000	-.1078	-.1416	-.0489
180.000	-.1299	-.1660	-.2997

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (R81T34)

ALPHAT(3) = -.490 BETAT (1) = -8.150

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9330	.6202	.2298	-.2135	-.3590	-.3442	-.2534	-.1519	-.1189	-.1312	-.1227	-.1151	-.1032	-.0976	-.0907
30.000			.3435	-.1049	-.3028	-.2935	-.2147	-.1318	-.1237	-.1735	-.1322	-.1038	-.0958	-.0883	-.0690
60.000			.4601	-.0018	-.1907	-.1819	-.1031	-.0137	-.0753	-.3224	-.2300	-.0990	-.0391	-.0221	-.0114
90.000		.9195	.5189	.0630	-.1094	-.0840	.0328	.1766	.2504		-.1388	.0071	-.0149	-.0194	.0006
120.000			.4889	.0427	-.1415	-.1291	-.0362	.0659	.0736	-.1005	.0354	.0396	.0020	.0000	.0183
135.000								.0157		.0666		.0263		-.0046	
150.000			.4112	-.0353	-.2083	-.1989	-.1209	-.0092	.0495	.2119	.1033	-.0696	-.1491	-.1094	-.0587
165.000				-.0985	-.2604	-.2399	-.1466	-.0327	.0519	.1838	.0997	-.3732	-.1321	-.1032	-.0251
180.000	.9330	.7309	.2750	-.1524	-.2782	-.2560	-.1416	-.0291	.0492	.1590	.0634	-.2816	-.1728	-.1504	-.0679
270.000		.4871							.3021						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0992	-.1527	-.5123
30.000	-.0736	-.1115	-.4740
60.000	-.0129	-.0285	-.2479
90.000	.0103	-.0273	
120.000	.0656	-.0155	.0673
135.000	.0739	.0368	.0224
150.000	.0094	-.0143	-.0567
165.000	.0460	.0130	.0776
180.000	.0076	-.0170	-.2283

ALPHAT(3) = -.470 BETAT (2) = -4.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9978	.6841	.2631	-.1885	-.3359	-.3185	-.2212	-.1201	-.0859	-.1004	-.0955	-.0821	-.0665	-.0560	-.0506
30.000			.3146	-.1394	-.3084	-.2872	-.2016	-.1041	-.0939	-.1481	-.1163	-.0848	-.0644	-.0614	-.0483
60.000			.3743	-.0864	-.2349	-.2106	-.1201	-.0172	-.0530	-.3211	-.2293	-.1230	-.0638	-.0470	-.0307
90.000		.8292	.4035	-.0462	-.1828	-.1405	-.0012	.1552	.2110		-.1661	-.0336	-.0533	-.0468	-.0242
120.000			.3974	-.0438	-.1960	-.1703	-.0596	.0549	.0762	-.1206	-.0076	-.0088	-.0485	-.0456	-.0167
135.000								.0189		.0422		-.0522		-.0524	
150.000			.3653	-.0850	-.2329	-.2121	-.1269	.0008	.0611	.1833	.0961	-.1090	-.1546	-.1378	-.0767
165.000				-.1102	-.2583	-.2340	-.1287	-.0181	.0753	.1964	.0973	-.1365	-.1322	-.1018	-.0307
180.000	.9978	.7441	.3030	-.1398	-.2689	-.2352	-.1252	-.0080	.0791	.1825	.0911	-.2920	-.1432	-.1149	-.0553
270.000		.6170							.2724						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT11 EXTERNAL TANK (RB1T34)

ALPHAT(3) = -.470 BETAT (2) = -4.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0583	-.1140	-.4803
30.000	-.0518	-.0867	-.4571
60.000	-.0233	-.0351	-.2621
90.000	.0044	-.0155	
120.000	.0260	-.0547	.0171
135.000	.0339	.0059	-.0081
150.000	-.0161	-.0327	-.0925
165.000	.0274	.0026	.0657
180.000	.0151	-.0205	-.1975

ALPHAT(3) = -.470 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.0170	.7041	.2721	-.1750	-.3313	-.3125	-.2177	-.1079	-.0706	-.0908	-.0838	-.0650	-.0575	-.0458	-.0340
30.000			.2780	-.1744	-.3171	-.2980	-.1965	-.0888	-.0662	-.1279	-.1021	-.0722	-.0584	-.0518	-.0390
60.000			.2780	-.1608	-.2777	-.2389	-.1257	-.0041	-.0299	-.3029	-.2115	-.1355	-.0760	-.0542	-.0375
90.000		.7233	.2871	-.1453	-.2341	-.1750	-.0210	.1504	.2624		-.1701	-.0512	-.0718	-.0629	-.0390
120.000			.2989	-.1307	-.2383	-.1973	-.0778	.0536	.0874	-.1237	-.0400	-.0548	-.0793	-.0686	-.0342
135.000								.0159		.0265		-.0950		-.0763	
150.000			.3125	-.1298	-.2562	-.2253	-.1254	-.0007	.0718	.1421	-.1090	-.1621	-.1948	-.1676	-.1175
165.000				-.1273	-.2586	-.2333	-.1281	-.0073	.0849	.1897	.0444	-.1771	-.1351	-.1199	-.0524
180.000	1.0170	.7467	.3110	-.1297	-.2624	-.2324	-.1174	-.0013	.0876	.1841	.0998	-.2886	-.1387	-.0987	-.0318
270.000		.7307							.2560						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0401	-.0977	-.4631
30.000	-.0410	-.0870	-.4434
60.000	-.0351	-.0539	-.2917
90.000	-.0069	-.0175	
120.000	.0020	-.0795	-.0559
135.000	.0073	-.0217	-.0842
150.000	-.0398	-.0712	-.2282
165.000	.0042	-.0174	.0760
180.000	.0102	-.0162	-.1438

ARC11-716 IA14 O1+T12+S12N25+AF11 EXTERNAL TANK (RB1T34)

ALPHAT(3) = -.470 BETAT (4) = 4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9918	.6713	.2541	-.1902	-.3432	-.3230	-.2274	-.1104	-.0872	-.1087	-.0949	-.0868	-.0712	-.0610	-.0478
30.000			.1998	-.2258	-.3438	-.3144	-.2039	-.0832	-.0562	-.1207	-.1057	-.0850	-.0703	-.0586	-.0487
60.000			.1744	-.2404	-.3092	-.2538	-.1277	.0068	-.0008	-.2763	-.1961	-.1373	-.0793	-.0574	-.0406
90.000		.6020	.1654	-.2371	-.2717	-.1965	-.0280	.1552	.2831		-.1260	-.0580	-.0826	-.0782	-.0505
120.000			.1970	-.2178	-.2753	-.2274	-.0888	.0515	.1025	-.1213	-.0683	-.0947	-.1012	-.0848	-.0498
135.000								.0090		.0017		-.1328		-.1063	
150.000			.2351	-.1913	-.2861	-.2506	-.1447	-.0098	.0634	.1025	-.2275	-.3350	-.3198	-.2402	-.1316
165.000				-.1613	-.2817	-.2515	-.1447	-.0247	.0669	.1604	-.0174	-.2234	-.1546	-.1149	-.0725
180.000	.9918	.7516	.3054	-.1425	-.2729	-.2427	-.1349	-.0238	.0761	.1604	.0887	-.2673	-.1603	-.1448	-.0734
270.000		.8333							.2440						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0585	-.1135	-.4688
30.000	-.0510	-.0929	-.4325
60.000	-.0423	-.0617	-.3005
90.000	-.0235	-.0385	
120.000	-.0218	-.1007	-.0956
135.000	-.0244	-.0545	-.1477
150.000	-.1081	-.1435	-.2597
165.000	-.0239	-.0527	.0134
180.000	-.0268	-.0583	-.2567

ALPHAT(3) = -.470 BETAT (5) = 8.150

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9235	.6083	.2130	-.2272	-.3702	-.3591	-.2678	-.1573	-.1261	-.1459	-.1357	-.1247	-.1086	-.1081	-.0951
30.000			.1170	-.2882	-.3755	-.3402	-.2218	-.0990	-.0625	-.1220	-.1225	-.1008	-.0853	-.0801	-.0671
60.000			.0739	-.3130	-.3261	-.2666	-.1246	.0228	.0185	-.2555	-.1800	-.1346	-.0871	-.0660	-.0549
90.000		.4777	.0519	-.3151	-.2873	-.2091	-.0244	.1657	.2994		-.1499	-.0801	-.1102	-.1041	-.0838
120.000			.0801	-.2951	-.2985	-.2457	-.0910	.0545	.1099	-.1294	-.1038	-.1128	-.1346	-.1246	-.0971
135.000								-.0018		-.0208		-.1652		-.1517	
150.000			.1386	-.2643	-.3202	-.2793	-.1680	-.0356	.0444	.0489	-.3452	-.3998	-.3957	-.2650	-.2028
165.000				-.2159	-.3138	-.2852	-.1760	-.0646	.0261	.0941	-.0640	-.2629	-.2111	-.2039	-.1270
180.000	[illegible]	.6204	.2624	-.1751	-.2956	-.2720	-.1552	-.0604	.0382	.1060	.0381	-.2545	-.2749	-.2116	-.1433
270.000		.9206							.2406						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT.1 EXTERNAL TANK (RB1T34)

ALPHAT(3) = -.470 BETAT (3) = 8.150

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.1081	-.1564	-.5041
30.000	-.0716	-.1079	-.4272
60.000	-.0659	-.0838	-.2967
90.000	-.0797	-.0939	
120.000	-.0626	-.1165	-.1138
135.000	-.0617	-.0802	-.1784
150.000	-.1570	-.1841	-.3062
165.000	-.0783	-.0994	-.0398
180.000	-.0986	-.1329	-.3033

ALPHAT(4) = 3.950 BETAT (1) = -8.170

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5560	.6360
PHI															
.000	.9151	.7306	.3461	-.1161	-.3016	-.3023	-.2167	-.1188	-.0841	-.0987	-.0946	-.0892	-.0812	-.0851	-.0808
30.000			.4748	.0121	-.2123	-.2155	-.1457	-.0611	-.0478	-.0999	-.0640	-.0546	-.0519	-.0480	-.0456
60.000			.5420	.0788	-.1294	-.1204	-.0406	.0663	.0462	-.2080	-.0536	-.0229	-.0292	-.0205	-.0139
90.000		.9024	.5075	.0525	-.1288	-.0969	.0239	.1625	.2378		-.2814	-.0486	-.0268	-.0079	.0138
120.000			.3976	-.0522	-.2137	-.2022	-.1141	-.0314	-.0570	-.2041	-.0940	.0044	.0019	.0046	.0370
135.000								-.0764		-.0113		.0070		-.0079	
150.000			.2780	-.1566	-.3014	-.2802	-.1994	-.0916	-.0370	.1543	.0619	-.0782	-.1363	-.0997	-.0414
165.000				-.2208	-.3390	-.3091	-.2012	-.0871	.0007	.1467	.0747	-.0734	-.1106	-.1012	-.0052
180.000	.9151	.9952	.1490	-.2625	-.3405	-.3059	-.1783	-.0552	.0226	.1325	.0539	-.2775	-.1602	-.1379	-.0525
270.000		.4624							.2897						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0926	-.1437	-.4976
30.000	-.0471	-.0859	-.4407
60.000	-.0010	-.0061	-.2107
90.000	.0287	-.0171	
120.000	.1013	.0479	.0639
135.000	.1066	.0819	.0426
150.000	.0497	.0199	-.0136
165.000	.0783	.0516	.0823
180.000	.0393	.0132	-.2203

ARC11-716 IA14 D1+T12+S12N25+AT11 EXTERNAL TANK (RB1T34)

ALPHAT(4) = 3.970 BETAT (2) = -4.050

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L	.0000	.0080	.0490	.1130	.1790	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9784	.8020	.3952	-.0713	-.2658	-.2599	-.1764	-.0823	-.0440	-.0583	-.0522	-.0511	-.0466	-.0387	-.0399
30.000			.4418	-.0282	-.2329	-.2293	-.1521	-.0424	-.0211	-.0766	-.0498	-.0370	-.0384	-.0357	-.0246
60.000			.4424	-.0160	-.1903	-.1667	-.0689	.0563	.0607	-.2084	-.0650	-.0352	-.0408	-.0360	-.0282
90.000		.8021	.3939	-.0537	-.1988	-.1429	-.0082	.1445	.2359		-.2494	-.0856	-.0671	-.0348	-.0079
120.000			.3111	-.1263	-.2493	-.2229	-.1207	-.0235	-.0351	-.2078	-.1229	-.0559	-.0524	-.0348	.0004
135.000								-.0527		-.0125		-.0736		-.0417	
150.000			.2422	-.1875	-.3010	-.2696	-.1793	-.0592	-.0026	.1413	.0799	-.1908	-.1466	-.1275	-.0484
165.000				-.2167	-.3163	-.2819	-.1731	-.0527	.0396	.1629	.0823	-.1245	-.1088	-.0811	-.0107
180.000	.9784	.6173	.1752	-.2390	-.3204	-.2772	-.1528	-.0345	.0553	.1597	.0909	-.2731	-.1241	-.0909	-.0307
270.000		.5922							.2622						

X/L	.7460	.8530	.9280
PHI			
.000	-.0445	-.1006	-.4667
30.000	-.0274	-.0633	-.4223
60.000	-.0149	-.0192	-.2263
90.000	.0232	-.0004	
120.000	.0639	.0103	.0449
135.000	.0764	.0565	-.0011
150.000	.0280	.0070	-.0832
165.000	.0659	.0404	.0840
180.000	.0505	.0206	-.1858

ALPHAT(4) = 3.970 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L	.0000	.0080	.0490	.1130	.1790	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9997	.8216	.4015	-.0619	-.2606	-.2518	-.1707	-.0715	-.0342	-.0479	-.0404	-.0365	-.0353	-.0311	-.0230
30.000			.3795	-.0846	-.2563	-.2492	-.1697	-.0505	-.0149	-.0705	-.0511	-.0449	-.0374	-.0383	-.0308
60.000			.3393	-.1133	-.2416	-.2051	-.0999	.0415	.0683	-.2010	-.0704	-.0443	-.0505	-.0440	-.0388
90.000		.7059	.2778	-.1564	-.2384	-.1800	-.0318	.1381	.2460		-.2201	-.0910	-.0801	-.0533	-.0204
120.000			.2262	-.1885	-.2781	-.2357	-.1174	-.0064	-.0040	-.2030	-.1427	-.1096	-.0852	-.0679	-.0215
135.000								-.0297		-.0178		-.1120		-.0634	
150.000			.1980	-.2161	-.3114	-.2705	-.1631	-.0351	.0268	.1193	-.1110	-.0802	-.1743	-.1412	-.0820
165.000				-.2212	-.3155	-.2751	-.1589	-.0374	.0524	.1542	.0431	-.1826	-.1223	-.0958	-.0254
180.000	.9997	.6186	.1819	-.2309	-.3190	-.2757	-.1497	-.0324	.0603	.1624	.1050	-.2988	-.1217	-.0789	-.0085
270.000		.7091							.2494						

X/L	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT11 EXTERNAL TANK (RB1T34)

ALPHAT(4) = 3.970 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0298	-.0810	-.4482
30.000	-.0257	-.0650	-.4165
60.000	-.0263	-.0375	-.2511
90.000	.0088	-.0061	
120.000	.0379	-.0233	.0016
135.000	.0435	.0232	-.0635
150.000	-.0194	-.0197	-.1697
165.000	.0394	.0176	.0502
180.000	.0488	.0264	-.1943

ALPHAT(4) = 3.960 BETAT (4) = 4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0090	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9811	.7897	.3763	-.0782	-.2748	-.2674	-.1873	-.0867	-.0525	-.0672	-.0541	-.0541	-.0493	-.0419	-.0407
30.000			.2918	-.1505	-.3033	-.2820	-.1791	-.0697	-.0260	-.0822	-.0658	-.0586	-.0512	-.0518	-.0479
60.000			.2157	-.2076	-.2936	-.2401	-.1135	.0339	.0794	-.1893	-.0798	-.0463	-.0521	-.0485	-.0452
90.000		.5907	.1618	-.2367	-.2783	-.2000	-.0349	.1417	.2639		-.1852	-.0971	-.0866	-.0637	-.0290
120.000			.1350	-.2557	-.2980	-.2419	-.1106	.0168	.0281	-.1884	-.1529	-.1367	-.1105	-.0864	-.0392
135.000								-.0138		-.0244		-.1433		-.0897	
150.000			.1441	-.2566	-.3197	-.2750	-.1591	-.0242	.0353	.0887	-.2071	-.3338	-.3193	-.2146	-.1037
165.000				-.2466	-.3262	-.2850	-.1663	-.0427	.0472	.1465	-.0169	-.2145	-.1417	-.1052	-.0485
180.000	.9811	.6288	.1813	-.2387	-.3282	-.2850	-.1663	-.0513	.0472	.1465	.0938	-.2539	-.1408	-.1260	-.0498
270.000		.8172							.2377						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0449	-.0976	-.4570
30.000	-.0464	-.0845	-.4257
60.000	-.0422	-.0576	-.2600
90.000	-.0028	-.0224	
120.000	.0126	-.0484	-.0472
135.000	.0091	-.0203	-.1322
150.000	-.0666	-.0973	-.2427
165.000	.0077	-.0192	-.0013
180.000	.0074	-.0288	-.2639

ARC11-716 IA14 01+T12+S12N25+AT11 EXTERNAL TANK (RB1T34)

ALPHAT(4) = 3.960 BETAT (5) = 0.190

SECTION 11)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L*	.0000	.0080	.0400	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9114	.7262	.3384	-.1105	-.3027	-.3049	-.2215	-.1297	-.0965	-.1060	-.0995	-.0943	-.0895	-.0853	-.0842
30.000			.1914	-.2393	-.3577	-.3271	-.2165	-.1024	-.0463	-.1030	-.0986	-.0865	-.0874	-.0803	-.0774
60.000			.0947	-.2967	-.3296	-.2733	-.1282	.0331	.0904	-.1830	-.0879	-.0555	-.0518	-.0555	-.0578
90.000		.4593	.0416	-.3142	-.2957	-.2156	-.0327	.1541	.2899		-.1267	-.0716	-.0838	-.0732	-.0500
120.000			.0363	-.3210	-.3092	-.2384	-.0964	.0312	.0569	-.1743	-.1715	-.1622	-.1453	-.1178	-.0744
135.000								-.0068		-.0395		-.1693		-.1389	
150.000			.0564	-.3124	-.3404	-.2900	-.1644	-.0320	.0342	.0484	-.3290	-.3653	-.3423	-.2409	-.1715
165.000				-.2925	-.3517	-.3058	-.1848	-.0739	.0154	.0894	-.0672	-.2480	-.2085	-.1874	-.1090
180.000	.9114	.5063	.1406	-.2720	-.3521	-.3116	-.1902	-.0816	.0121	.0965	.0332	-.2498	-.2578	-.2165	-.1241
270.000		.9076							.2344						

X/L*	.7460	.8530	.9280
PHI			
.000	-.0950	-.1430	-.4873
30.000	-.0774	-.1051	-.4231
60.000	-.0518	-.0677	-.2819
90.000	-.0321	-.0366	
120.000	-.0199	-.0707	-.0511
135.000	-.0292	-.0463	-.1456
150.000	-.1232	-.1484	-.2815
165.000	-.0514	-.0725	-.0222
180.000	-.0721	-.1034	-.2971

ALPHAT(5) = 7.940 BETAT (1) = -0.150

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L*	.0000	.0080	.0400	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.8581	.8156	.4544	-.0077	-.2332	-.2367	-.1780	-.0765	-.0432	-.0570	-.0585	-.0618	-.0561	-.0646	-.0612
30.000			.5785	.1140	-.1306	-.1402	-.0795	.0110	.0309	-.0261	-.0124	-.0037	-.0071	-.0124	-.0033
60.000			.5900	.1317	-.0914	-.0777	.0033	.1228	.1456	-.0881	.0005	.0403	.0267	.0249	.0199
90.000		.6371	.4682	.0284	-.1491	-.1249	-.0107	.1160	.1536		-.1107	.0569	-.0033	-.0042	.0296
120.000			.2840	-.1469	-.2892	-.2601	-.2030	-.1344	-.1767	-.2705	-.3847	-.0163	.0110	.0210	.0451
135.000								-.1627		-.0737		-.0172		.0039	
150.000			.1456	-.2649	-.3750	-.3467	-.2672	-.1591	-.1034	.1022	.0116	-.0891	-.1228	-.0910	-.0272
165.000				-.3135	-.3900	-.3482	-.2575	-.1246	-.0267	.1147	.0564	-.0645	-.0835	-.0719	.0113
180.000	.8581	.4727	.0325	-.3369	-.3718	-.3094	-.1928	-.0671	.0125	.1189	.0492	-.2614	-.1357	-.1107	-.0293
270.000		4019							.2080						

X/L*	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT11 EXTERNAL TANK (RB1T34)

ALPHAT(1) = 7.940 BETAT (1) = -8.150

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	-.0705	-.1231	-.4850
30.000	-.0077	-.0519	-.4110
60.000	.0240	.0151	-.1993
90.000	.0561	.0145	
120.000	.1175	.0817	.0286
135.000	.1321	.1087	.0587
150.000	.0654	.0385	-.0084
165.000	.0905	.0576	.0937
180.000	.0648	.0350	-.1760

ALPHAT(5) = 7.980 BETAT (2) = -4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9142	.8889	.5029	.0302	-.1945	-.1942	-.1336	-.0363	.0008	-.0112	-.0115	-.0128	-.0128	-.0149	-.0094
30.000			.5392	.0681	-.1638	-.1609	-.0902	.0097	.0371	-.0160	-.0007	.0052	.0073	-.0061	.0053
60.000			.4810	.0186	-.1582	-.1383	-.0393	.0914	.1455	-.0930	-.0181	.0192	.0162	.0052	.0026
90.000		.7374	.3492	-.0856	-.2169	-.1783	-.0444	.0968	.1461		-.0797	.0326	-.0176	-.0238	.0023
120.000			.2059	-.2171	-.3134	-.2900	-.1942	-.1097	-.1489	-.2598	-.3828	-.0744	-.0308	-.0190	.0175
134.000								-.1157		-.0509		-.0940		-.0352	
150.000			.1159	-.2894	-.3638	-.3327	-.2301	-.1121	-.0461	.1031	.0355	-.1885	-.1414	-.1058	-.0379
165.000				-.3081	-.3526	-.3236	-.1963	-.0793	.0195	.1445	0697	-.1084	-.1017	-.0665	.0106
180.000	.0142	.4807	.0509	-.3228	-.3567	-.3047	-.1679	-.0479	.0424	.1555	.0949	-.2631	-.1131	-.0803	-.0151
270.000		.5264							.1810						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0229	-.0744	-.4475
30.000	.0011	-.0373	-.3942
60.000	.0091	-.0022	-.2072
90.000	.0371	.0145	
120.000	.0815	.0511	.0258
135.000	.0896	.0791	.0002
150.000	.0529	.0326	-.0376
165.000	.0916	.0665	.0766
180.000	.0093	.0445	-.1776

ARC11-716 IA14 01+712+S12X25+A711 EXTERNAL TANK (R81T34)

ALPHAT(5) = 7.990 BETAT (5) = .010

SECTION 1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9440	.9129	.5133	.0408	-.1831	-.1970	-.1142	-.0275	.0187	-.0055	-.0007	.0050	-.0009	.0027	.0018
30.000			.4674	.0259	-.1983	-.1981	-.1166	-.0148	.0309	-.0250	-.0151	-.0060	-.0090	-.0102	-.0069
60.000			.3572	-.0872	-.2295	-.1984	-.0836	.0031	.1353	-.0335	-.0395	.0039	-.0030	-.0054	-.0107
90.000		.6362	.2317	-.1836	-.2710	-.2145	-.0666	.0887	.1770		-.1113	.0098	-.0308	-.0342	-.0138
120.000			.1327	-.2661	-.3259	-.2032	-.1728	-.0756	-.1027	-.2408	-.3589	-.1175	-.0661	-.0440	-.0021
135.000								-.0759		-.0415		-.1304		-.0535	
150.000			.0878	-.3058	- .12	-.3039	-.1976	-.0694	-.1112	.0950	-.0852	-.2014	-.1657	-.1234	-.0690
165.000				-.3056	-.3521	-.2993	-.1794	-.0557	.0381	.1498	.0398	-.1592	-.1044	-.0758	-.0077
180.000	.9440	.4840	.0680	-.3133	-.3523	-.3019	-.1707	-.0468	.0446	.1543	.1095	-.2784	-.1029	-.0647	.0039
270.000		.6498							.1627						

X/L	.7490	.8.30	.9280
PHI			
.000	-.0526	-.0604	-.4295
30.000	-.0059	-.0451	-.4083
60.000	-.0027	-.0207	-.2407
90.000	.0267	.0092	
120.000	.0002	.0294	-.0269
135.000	.0355	.0525	-.0677
150.000	.0377	.0962	-.1626
165.000	.0645	.0537	.1100
180.000	.0701	.0572	-.1395

ALPHAT(5) = 7.970 BETAT (4) = 4.120

SECTION 2)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9219	.8817	.4918	.0236	-.2007	-.2016	-.1290	-.0416	-.0003	-.0236	-.0177	-.0183	-.0192	-.0133	-.0146
30.000			.3716	-.0763	-.2616	-.2451	-.1550	-.0472	.0086	-.0470	-.0434	-.0400	-.0436	-.0418	-.0385
60.000			.2278	-.1935	-.2901	-.2458	-.1130	.0440	.1398	-.0969	- 0500	-.0177	-.0169	-.0205	-.0122
90.000		.4243	.1230	-.2702	-.2994	-.2326	-.0728	.0939	.1784		-.1399	-.0060	-.0406	-.0391	-.0223
120.000			.0599	-.3123	-.3235	- 2747	-.1475	-.0372	-.0562	-.2074	-.3560	-.1400	-.0932	-.0588	-.0188
135.000								-.0428		-.0999		-.1427		-.0728	
150.000			.0469	-.3278	-.3381	-.2862	-.1728	-.0437	.0180	.0715	-.2039	-.3188	-.2605	-.1884	-.0895
165.000				-.3182	-.3496	-.2987	-.1761	-.0547	.0342	.1357	-.0340	-.1815	-.1141	-.0787	-.0273
180.000	.9213	.4954	.0593	-.3211	- .3626	-.3087	-.1802	.0663	.0283	.1360	-.1129	-.2287	-.1123	-.1027	-.0290
270.000		.7630							.1583						

X/L	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T34)

ALPHAT(3) = 7.970 BETAT (4) = 4.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0239	-.0771	-.4442
30.000	-.0349	-.0715	-.4192
60.000	-.0126	-.0324	-.2556
90.000	.0089	-.0053	
120.000	.0373	-.0113	-.0411
135.000	.0320	.0119	-.1193
150.000	-.0238	-.0646	-.2110
165.000	.0342	.0112	.0175
180.000	.0324	-.0012	-.2511

ALPHAT(5) = 7.960 BETAT (5) = 8.240

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.17[illegible]	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.8508	.8165	.4525	.0005	-.2221	-.2355	-.1703	-.0768	-.0488	-.0609	-.0587	-.0619	-.0586	-.0640	-.0574
30.000			.2651	-.1802	-.3240	-.3102	-.2191	-.1016	-.0393	-.0753	-.0567	-.0783	-.0843	-.0843	-.0789
60.000			.0962	-.2996	-.3431	-.2876	-.1602	.0202	.1363	-.0851	-.0699	-.0237	-.0307	-.0289	-.0278
90.000		.3973	.0049	-.3451	-.3097	-.2341	-.0638	.1151	.1970		-.1287	-.0126	-.0430	-.0607	-.0437
120.000			-.0311	-.3636	-.3155	-.2523	-.1141	-.0010	-.0115	-.1821	-.2255	-.1452	-.1062	-.0884	-.0543
135.000								-.0184		-.0435		-.1500		-.[illegible]	
150.000			-.0204	-.3702	-.3378	-.2876	-.1554	-.0294	.0243	.0566	-.2873	-.3722	-.2641	-.2066	-.1394
165.000				-.3609	-.3659	-.3167	-.1837	-.0652	.0170	.0986	-.0696	-.1945	-.1814	-.1556	-.0804
180.000	.8506	.4121	.0348	-.3477	-.3820	-.3346	-.1917	-.0951	-.0007	.0882	.0305	-.2035	-.2275	-.1818	-.0963
270.000		.8499							.1609						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0708	-.1216	-.4630
30.000	-.0792	-.0989	-.4248
60.000	-.0322	-.0385	-.2482
90.000	-.0211	-.0069	
120.000	.0034	-.0212	-.0477
135.000	-.0028	-.0057	-.1313
150.000	-.0745	-.1037	-.2598
165.000	-.0144	-.0312	.0070
180.000	-.0340	-.0719	-.2769

ARC11-716 IA14 01+T12+S12N25+AT11 EXTERNAL TANK (RB1T35) (14 FEB 74)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES
LREF = 38.7090 INCHES YMRP = .0000 INCHES
BREF = 38.7090 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = .750 ELEVON = .000
RUDDER = .000 SPDBRK = .000

ALPHAT(1) = -8.470 BETAT (1) = -8.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.8933	.4482	.0393	-.3983	-.4708	-.4149	-.2715	-.1597	-.1273	-.1719	-.1975	-.1493	-.1033	-.0933	-.0811
30.000			.1353	-.3209	-.4694	-.4467	-.3333	-.2438	-.2560	-.3246	-.3342	-.1821	-.1228	-.1169	-.0999
60.000			.3049	-.1679	-.3624	-.3250	-.2499	-.1901	-.3144	-.4696	-.6756	-.1845	-.0260	-.0419	-.0524
90.000		.8807	.4965	.0184	-.1837	-.1441	-.0062	.1369	.1623		-.7059	-.5745	-.2199	-.1423	-.1253
120.000			.6261	.1478	-.0898	-.0716	.0312	.1892	.2735	.0511	.0494	.0187	-.0056	.0053	.0308
135.000								.1523		.1758		-.0152		-.0134	
150.000			.6508	.1669	-.0859	-.0794	-.0018	.1244	.1974	.3116	.1962	-.1187	-.1608	-.1312	-.0631
165.000				.1241	-.1279	-.1279	-.0397	.0740	.1677	.2862	.1623	-.1541	-.1438	-.1298	-.0403
180.000	.8933	.9574	.5761	.0559	-.1764	-.1709	-.0759	.0440	.1356	.2480	.0944	-.4442	-.2042	-.1815	-.0891
270.000		.4587							.1950						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0859	-.1368	-.4776
30.000	-.1082	-.1376	-.4427
60.000	-.0663	-.0987	-.2334
90.000	-.2004	-.3229	
120.000	.0534	-.1525	.1457
135.000	.0553	-.0279	.1290
150.000	-.0153	-.0261	-.0369
165.000	.0081	-.0111	.1837
180.000	-.0042	-.0437	-.1263

ALPHAT(1) = -8.430 BETAT (2) = -4.050

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9502	.5061	.0769	-.3685	-.4395	-.3804	-.2397	-.1204	-.0986	-.1492	-.1829	-.1328	-.0650	-.0509	-.0540
30.000			.1279	-.3297	-.4414	-.4018	-.2762	-.1731	-.1719	-.2513	-.3141	-.1557	-.0863	-.0799	-.0705
60.000			.2351	-.2364	-.3769	-.3278	-.2337	-.1480	-.2552	-.4108	-.6676	-.2399	-.0334	-.0373	-.0439
90.000		.7925	.3861	-.0883	-.2503	-.1977	-.0403	.1234	.1583		-.6487	-.5983	-.2062	-.1194	-.0881
120.000			.5247	.0406	-.1600	-.1315	-.0057	.1565	.2628	.0333	-.0065	-.0546	-.0639	-.0410	-.0025
135.000								.1249		.1503		-.0741		-.0529	
150.000			.5920	.1047	-.1310	-.1234	-.0284	.1085	.1883	.2750	.0267	-.0869	-.1302	-.1425	-.0813

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T35)

ALPHAT(1) = -8.430 BETAT (2) = -4.050

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
165.000				.1032	-.1332	-.1270	-.0366	.0848	.1759	2898	.1244	-.2391	-.1697	-.1205	-.0405
180.000	.9502	.9791	.5631	.0741	-.1559	-.1474	-.0426	.0774	.1617	.2724	.1244	-.5716	-.1747	-.1348	-.0652
270.000		.5752							.1722						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0660	-.1131	-.4491
30.000	-.0726	-.1118	-.4456
60.000	-.0526	-.0779	-.2481
90.000	-.1137	-.1778	
120.000	.0191	-.1929	.0919
135.000	.0173	-.0652	.0679
150.000	-.0437	-.0728	-.0942
165.000	-.0055	-.0363	.1253
180.000	-.0181	-.0572	-.1496

ALPHAT(1) = -8.420 BETAT (3) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9789	.5257	.0874	-.3542	-.4191	-.3693	-.2305	-.1039	-.0830	-.1370	-.1767	-.1189	-.0469	-.0280	-.0271
30.000			.1044	-.3405	-.4236	-.3701	-.2300	-.1147	-.1099	-.2013	-.2765	-.1510	-.0542	-.0558	-.0481
60.000			.1634	-.2956	-.3861	-.3258	-.1955	-.0996	-.1909	-.3550	-.6314	-.2434	-.0369	-.0333	-.0363
90.000		.6928	.2724	-.1968	-.3056	-.2308	-.0542	.1215	.1693		-.6125	-.5622	-.1829	-.0889	-.0572
120.000			.4062	-.0689	-.2371	-.1950	-.0431	.1274	.2550	.0234	-.0561	-.1242	-.0993	-.0601	-.0209
135.000								.0923		.1192		-.1460		-.0850	
150.000			.5138	.0266	-.1876	-.1692	-.0685	.0791	.1703	.2354	-.1211	-.3672	-.2824	-.1978	-.1249
165.000				.0698	-.1615	-.1536	-.0582	.0770	.1755	.2800	.0574	-.2747	-.1754	-.1286	-.0520
180.000	.9789	.9815	.5689	.0803	-.1532	-.1436	-.0339	.0868	.1823	.2736	.1327	-.5622	-.1747	-.1191	-.0409
270.000		.6894							.1552						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0414	-.1047	-.4329
30.000	-.0525	-.0976	-.4106
60.000	-.0475	-.0706	-.2606
90.000	-.0740	-.1087	
120.000	-.0095	-.1753	-.0075
135.000	-.0177	-.0854	-.0867
150.000	-.0984	-.1322	-.2561

ARC11-716 IA14 01+T12+S12N25+AT11 EXTERNAL TANK (R81T35)

ALPHAT(1) = -8.420 BETAT (3) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
165.000	-.0218	-.0716	.0404
180.000	-.0121	-.0629	-.2013

ALPHAT(1) = -8.430 BETAT (4) = 4.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2480	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9549	.5033	.0753	-.3675	-.4323	-.3819	-.2448	-.1236	-.0992	-.1496	-.1872	-.1284	-.0681	-.0519	-.0507
30.000			.0638	-.3683	-.4174	-.3540	-.2039	-.0833	-.0727	-.1568	-.2450	-.1481	-.0417	-.0586	-.0422
60.000			.0822	-.3614	-.3861	-.3219	-.1569	-.0521	-.1294	-.3158	-.6064	-.2185	-.0333	-.0522	-.0364
90.000		.5764	.1521	-.2933	-.3412	-.2485	-.0558	.1220	.1859		-.6078	-.5279	-.1569	-.0680	-.0417
120.000			.2729	-.1855	-.3080	-.2467	-.0870	.0969	.2453	.0102	-.1027	-.1660	-.1231	-.0847	-.0488
135.000								.0460		.0719		-.2079		-.1285	
150.000			.4078	-.0690	-.2553	-.2284	-.1225	.0269	.1412	.1668	-.2743	-.4876	-.3257	-.2362	-.1524
165.000				.0234	-.2010	-.1900	-.0844	.0420	.1462	.2369	.0012	-.3743	-.1839	-.1301	-.0858
180.000	.9549	.9741	.5931	.0688	-.1636	-.1514	-.0459	.0695	.1675	.2466	.1204	-.4961	-.1865	-.1622	-.0773
270.000		.7966							.1483						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0574	-.1130	-.4384
30.000	-.0539	-.1000	-.4151
60.000	-.0459	-.0735	-.2762
90.000	-.0504	-.0897	
120.000	-.0478	-.1660	-.0754
135.000	-.0544	-.1143	-.1806
150.000	-.1448	-.2020	-.3091
165.000	-.0470	-.1013	-.0170
180.000	-.0523	-.0892	-.2643

ARC11-716 IA14 O4+T12+S12N25+AT11 EXTERNAL TANK (R81T35)

ALPHAT(1) = -8.450 BETAT (5) = 8.170

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.8891	.4427	.0343	-.4013	-.4700	-.4149	-.2746	-.1617	-.1321	-.1721	-.1952	-.1544	-.1051	-.0905	-.0811
30.000			-.0028	-.4168	-.4104	-.3414	-.1850	-.0639	-.0462	-.1401	-.2222	-.1380	-.0547	-.0529	-.0639
60.000			-.0004	-.4053	-.3596	-.2746	-.1249	-.0139	-.0727	-.2746	-.6060	-.2138	-.0333	-.0420	-.0491
90.000		.4571	.0429	-.3751	-.3607	-.2472	-.0486	.1275	.2013		-.8099	-.4611	-.1225	-.0568	-.0423
120.000			.1501	-.2910	-.3672	-.2986	-.1249	.0700	.2325	-.0069	-.1386	-.1995	-.1678	-.1378	-.1090
135.000								.0010		.0285		-.2827		-.1941	
150.000			.2985	-.1683	-.3275	-.2917	-.1754	-.0218	.0922	0857	-.3694	-.5661	-.4138	-.2739	-.2153
165.000				-.0425	-.2539	-.2309	-.1338	-.0121	.0948	.1513	-.0767	-.4328	-.2351	-.2200	-.1409
180.000	.8891	.8658	.5250	.0440	-.1907	-.1783	-.0804	.0283	.1237	.1940	.0827	- 3811	-.2798	-.2464	-.1549
270.000		.8781							.1438						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0850	-.1309	-.4660
30.000	-.0795	-.1222	-.4244
60.000	-.0552	-.0918	-.2964
90.000	-.0565	-.1172	
120.000	-.0924	-.1986	-.0985
135.000	-.0940	-.1377	-.2011
150.000	-.2063	-.2558	-.3164
165.000	-.1111	-.1476	-.0670
180.000	-.1327	-.1629	-.2795

ALPHAT(2) = -4.370 BETAT (1) = -8.160

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9625	.5741	.1609	-.3064	-.4336	-.3959	-.2706	-.1507	-.1280	-.1673	-.1733	-.1274	-.0980	-.0926	-.0880
30.000			.2732	-.2030	-.3956	-.3799	-.2706	-.1701	-.1874	-.2571	-.2539	-.1372	-.1127	-.1058	-.0840
60.000			.4153	-.0733	-.2765	-.2589	-.1549	-.0657	-.1569	-.3865	-.5683	-.0922	-.0102	-.0265	-.0421
90.000		.9442	.5367	.0909	-.1497	-.1134	.0316	.1905	.2669		-.5598	-.3416	-.1225	-.1007	-.0843
120.000			.5843	.0940	-.1228	-.1027	.0122	.1452	.1903	-.0498	.0034	.0161	-.0076	-.0048	.0252
135.000								.0919		.1164		-.0104		-.0200	
150.000			.5519	.0642	-.1613	-.1566	-.0702	.0622	.1243	.2662	.1528	-.1367	-.1665	-.1339	-.0578
165.000				.0033	-.2178	-.2071	-.1041	.0171	.1091	.2461	.1379	-.1515	-.1413	-.1249	-.0335
180.000	.9625	.8884	.4170	-.0580	-.2530	-.2351	-.1162	.0066	.0968	.2168	.0847	-.4451	-.1938	-.1605	-.0715
270.000		.5289							.3189						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT11 EXTERNAL TANK (RB1T35)

ALPHAT(2) = -4.370 BETAT (1) = -8.150

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0939	-.1375	-.4727
30.000	-.0860	-.1153	-.4334
60.000	-.0453	-.0442	-.2070
90.000	-.1222	-.1909	
120.000	.0706	-.0574	.1624
135.000	.075	.0339	.1525
150.000	.0135	.0250	.0071
165.000	.0401	.0390	.2020
180.000	.0085	.0018	-.1984

ALPHAT(2) = -4.370 BETAT (2) = -4.070

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0220	.6302	.1972	-.2808	-.4059	-.3709	-.2345	-.1154	-.0969	-.1440	-.1420	-.1029	-.0694	-.0561	-.0481
30.000			.2512	-.2281	-.3875	-.3593	-.2313	-.1275	-.1344	-.2294	-.2100	-.1186	-.0818	-.0773	-.0587
60.000			.3389	-.1527	-.3125	-.2832	-.1558	-.0436	-.1206	-.3754	-.5514	-.0864	-.0340	-.0301	-.0339
90.000		.8563	.4252	-.0596	-.2215	-.1652	-.0015	.1754	.2725		-.3767	-.0336	-.0272	-.0496	-.0347
120.000			.4341	-.0003	-.1906	-.1587	-.0194	.1268	.1993	-.0696	-.0151	-.0275	-.0582	-.0433	-.0151
135.000								.0829		.0969		-.0646		-.0606	
150.000			.4998	.0094	-.1968	-.1820	-.0777	.0592	.1339	.2387	.0384	-.0941	-.1752	-.1460	-.0774
165.000				-.0099	-.2171	-.2005	-.0916	.0405	.1295	.2520	.1238	-.2257	-.1712	-.1291	-.0388
180.000	1.0220	.8953	.4488	-.0402	-.2345	-.2127	-.0924	.0402	.1253	.2394	.1214	-.5276	-.1699	-.1338	-.0597
270.000		.6448							.2912						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0527	-.0956	-.4495
30.000	-.0565	-.0914	-.4249
60.000	-.0369	-.0534	-.2328
90.000	-.0133	-.0809	
120.000	.0312	-.1017	.0834
135.000	.0375	-.0024	.0834
150.000	-.0134	-.0223	-.0401
165.000	.022.	.0067	.1296
180.000	.0079	-.0149	-.1334

ARC11-716 IA14 01+T12+S12N25+AT11 EXTERNAL TANK (RB1T35)

ALPHAT(2) = -4.360 BETAT (3) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0420	.6487	.2034	-.2684	-.3960	-.3584	-.2275	-.1056	-.0826	-.1290	-.1241	-.0885	-.0568	-.0464	-.0350
30.000			.2144	-.2629	-.3848	-.3443	-.2074	-.0884	-.0895	-.1856	-.1703	-.0962	-.0728	-.0622	-.0418
60.000			.2493	-.2253	-.3306	-.2781	-.1452	-.0184	-.0840	-.4090	-.5153	-.1210	-.0435	-.0345	-.0292
90.000		.7549	.3086	-.1658	-.2778	- 2043	-.0168	.1710	.2797		-.3068	.0070	-.0295	-.0529	-.7421
120.000			.3761	-.1035	-.2499	-.2032	-.0479	.1149	.2002	-.0737	-.0453	-.0645	-.0864	-.0702	-.0287
135.000								.0708		.0752		-.1226		-.0858	
150.000			.4309	-.0554	-.2369	-.2085	-.0953	.0542	.1348	.2016	-.1201	-.3132	-.2598	-.1918	-.1172
165.000				-.0329	-.2293	-.2097	-.0908	.0384	.1364	.2447	.0581	-.2569	-.1702	-.1300	-.0532
180.000	1.0420	.8918	.4590	-.0348	-.2338	-.2103	-.0802	.0421	.1404	.2400	.1302	-.4707	-.1625	-.1176	-.0411
270.000		.7560							.2744						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0424	-.0913	-.4421
30.000	-.0429	-.0775	-.4196
60.000	-.0305	-.0498	-.2634
90.000	-.0197	-.0371	
120.000	.0016	-.1132	-.0114
135.000	.0050	-.0421	-.0586
150.000	-.0696	-.0730	-.2219
165.000	-.0008	-.0250	.0257
180.000	.0070	-.0179	-.1221

ALPHAT(2) = -4.370 BETAT (4) = 4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0170	.6261	.1869	-.2780	-.4128	-.3711	-.2407	-.1236	-.1020	-.1460	-.1394	-.1042	-.0723	-.0576	-.0505
30.000			.1603	-.3059	-.3963	-.3404	-.1975	-.0778	-.0026	-.1654	-.1545	-.0986	-.0682	-.0581	-.0497
60.000			.1598	-.2975	-.3505	-.2803	-.1278	.0055	-.0312	-.3914	-.4430	-.1481	-.0674	-.0487	-.0336
90.000		.6371	.1953	-.2646	-.3098	-.2144	-.0167	.1757	.2981		-.2899	.0151	-.0482	-.0702	-.0606
120.000			.2565	-.2012	-.3061	-.2392	-.0714	.1032	.2046	-.0898	-.0883	-.1036	-.1075	-.0864	-.0464
135.000								.0515		.0410		-.1641		-.1256	
150.000			.3474	-.1312	-.2941	-.2563	-.1249	.0255	.1195	.1488	-.2449	-.4579	-.3366	-.2455	-.1344
165.000				-.0744	-.2678	-.2392	-.1188	.0170	.1148	.2124	.0009	-.3437	-.1796	-.1283	-.0738
180.000	1.0170	.8905	.4462	-.0433	-.2462	-.2194	-.0945	.0239	.1245	.2209	.1198	-.4464	-.1823	-.1662	-.0709
270.000		.8560							.2650						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT11 EXTERNAL TANK (RB1T35)

ALPHAT(2) = -4.370 BETAT (4) = 4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0555	-.0999	-.4414
30.000	-.0488	-.0850	-.4274
60.000	-.0317	-.0540	-.2729
90.000	-.0346	-.0601	
120.000	-.0233	-.1266	-.0592
135.000	-.0280	-.0704	-.1460
150.000	-.1150	-.1470	-.2772
165.000	-.0273	-.0552	-.0033
180.000	-.0236	-.0497	-.2413

ALPHAT(2) = -4.380 BETAT (5) = 8.190

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6360
PHI															
.000	.9572	.5636	.1505	-.3089	-.4400	-.4015	-.2777	-.1568	-.1295	-.1681	-.1732	-.1275	-.1044	-.0936	-.0941
30.000			.0816	-.3583	-.4131	-.3488	-.1991	-.0697	-.0429	-.1509	-.1565	-.1018	-.0763	-.0769	-.0693
60.000			.0683	-.3565	-.3467	-.2676	-.0984	.0361	.0104	-.3614	-.3804	-.1677	-.0808	-.0644	-.0465
90.000		.5209	.0840	-.3465	-.3154	-.2136	-.0040	.1789	.3174		-.2438	.0148	-.0642	-.0984	-.1031
120.000			.1479	-.2984	-.3379	-.2622	-.0860	.0941	.1999	-.1015	-.1250	-.1378	-.1444	-.1329	-.0992
135.000								.0256		.0116		-.2225		-.1778	
150.000			.2426	-.2241	-.3433	-.2932	-.1634	-.0109	.0967	.0834	-.3434	-.5062	-.3838	-.2501	-.1844
165.000				-.1327	-.3079	-.2717	-.1537	-.0276	.0771	.1389	-.0774	-.3817	-.2210	-.2124	-.1298
180.000	.9572	.8067	.4152	-.0701	-.2712	-.2436	-.1155	-.0111	.0925	.1638	.0784	-.3478	-.2715	-.2290	-.1350
270.000		.9484							.2633						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0891	-.1366	-.4559
30.000	-.0640	-.0929	-.4005
60.000	-.0493	-.0608	-.2443
90.000	-.0962	-.1361	
120.000	-.0685	-.1480	-.0848
135.000	-.0630	-.0792	-.1424
150.000	-.1480	-.1796	-.2754
165.000	-.0748	-.0892	-.0258
180.000	-.0911	-.1103	-.2599

ARC11-715 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T35)

ALPHAT(3) = -.520 BETAT (1) = -8.200

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9828	.6739	.2633	-.2173	-.4027	-.3782	-.2594	-.1466	-.1145	-.1497	-.1471	-.1239	-.1019	-.0945	-.0911
30.000			.3915	-.0967	-.3292	-.3172	-.2194	-.1207	-.1271	-.2134	-.1752	-.1109	-.0898	-.0855	-.0657
60.000			.5068	.0109	-.2090	-.1909	-.0928	.0146	-.0325	-.3686	-.3970	-.0560	-.0042	-.0107	-.0072
90.000		.9734	.5625	.0658	- 1400	-.1050	.0517	.2107	.3112		-.4155	.0676	-.0063	-.0293	-.0075
120.000			.5280	.0428	-.1729	-.1491	-.0332	.0863	.0965	-.1454	.0071	.0605	-.0026	-.0120	.0221
135.000								.0285		.0579		.0230		-.0230	
150.000			.4506	-.0401	-.2451	-.2272	-.1355	.0030	.0508	.2215	.1294	-.0921	-.1664	-.1175	-.0404
165.000				-.1091	-.3022	-.2742	-.1526	-.0286	.0616	.2134	.1292	-.1279	-.1473	-.1222	-.0183
180.000	.9828	.7767	.3055	-.1628	- 3227	-.2838	-.1510	-.0207	.0634	.1990	.0811	-.4084	-.1916	-.1672	-.0650
270.000		.5356							.3717						

X/LT	.7460	.8530	.9280
PHI			
700	-.0922	-.1380	- 4543
30.000	-.0631	-.0939	-.4219
60.000	-.0042	-.0125	-.2156
90.000	.0237	-.0117	
120.000	.0851	.0192	.1421
135.000	.0952	.0824	.1403
150.000	.0436	.0557	.0377
165.000	.0691	.0705	.2034
180.000	.0331	.0359	- 0963

ALPHAT(3) = -.410 BETAT (2) = -4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0450	.7396	.3078	-.1886	-.3699	-.3470	-.2201	-.1014	-.0702	-.1175	-.1128	-.0845	-.0656	-.0537	-.0422
30.000			.3654	-.1300	-.3314	-.3079	-.1928	-.0808	-.0793	-.1765	-.1495	-.0880	-.0684	-.0589	-.0414
60.000			.4229	-.0740	-.2589	-.2235	-.1030	.0255	-.0080	-.3683	-.3856	-.0888	-.0241	-.0178	-.0138
90.000		.9828	.4450	-.0438	-.2128	-.1605	.0208	.1986	.3181		-.4616	.0254	-.0460	-.0884	-.0412
120.000			.4361	-.0457	-.2246	-.1894	-.0512	.0847	.1137	-.1601	-.0303	.0028	-.0932	-.0589	-.0181
135.000								.0404		.0468		-.0531		-.0629	
150.000			.4034	-.0819	-.2631	-.2345	-.1239	.0204	.0789	.2005	.0788	-.1217	-.1768	-.1481	-.0624
165.000				-.1159	-.2863	-.2558	-.1325	-.0007	.0889	.2248	.1214	-.1928	-.1473	-.1217	-.0291
180.000	1.0490	.7926	.3388	-.1482	-.3009	-.2688	-.1258	.0086	.0960	.2140	.1193	-.4662	-.1989	-.1299	-.0502
270.000		.6619							.3492						

X/LT	.7480	.8530	.9280
PHI			

ARC11-716 IA14 01+710-012N-25+AT11 EXTERNAL TANK (RB1T35)

ALPHAT(3) = -.510 BETAT (2) = -4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9230
PHI			
.000	-.0475	-.0912	-.4287
30.000	-.0346	-.0682	-.4033
60.000	-.0083	-.0154	-.2310
90.000	.0125	.0083	
120.000	.0472	-.0225	.0784
135.000	.0612	.0488	.0829
150.000	.0209	.0196	-.0176
165.000	.0522	.0492	.1450
180.000	.0365	.0298	-.1198

ALPHAT(3) = -.510 BETAT (3) = .020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0650	.7621	.3134	-.1796	-.3555	-.3287	-.2081	-.0880	-.0609	-.1052	-.1013	-.0788	-.0549	-.0398	-.0261
30.000			.3207	-.1739	-.3479	-.3121	-.1845	-.0624	-.0441	-.1497	-.1304	-.0795	-.0539	-.0470	-.0348
60.000			.3217	-.1613	-.2979	-.2480	-.1069	.0348	.0213	-.3590	-.3561	-.1191	-.0478	-.0380	-.0269
90.000		.7830	.3320	-.1521	-.2658	-.1964	.0057	.1943	.3317		-.4546	.0020	-.0839	-.0958	-.0570
120.000			.3377	-.1479	-.2696	-.2200	-.0637	.0901	.1329	-.1635	-.0621	-.0504	-.0874	-.0773	-.0320
135.000								.0437		.0329		-.1048		-.0905	
150.000			.3531	-.1374	-.2893	-.2475	-.1206	.0271	.0955	.1694	-.1230	-.2519	-.2285	-.1624	-.1009
165.000				-.1339	-.2945	-.2537	-.1219	.0111	.1047	.2212	.0521	-.2425	-.1622	-.1296	-.0443
180.000	1.0850	.7963	.3487	-.1347	-.3015	-.2579	-.1125	.0129	.1063	.2141	.1292	-.4362	-.1529	-.1116	-.0291
270.000		.7735							.3306						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0317	-.0772	-.4190
30.000	-.0275	-.0590	-.4050
60.000	-.0165	-.0243	-.2501
90.000	.0003	.0043	
120.000	.0242	-.0614	.0181
135.000	.0261	.0040	-.0272
150.000	-.0295	-.0329	-.1608
165.000	.0257	.0102	.0476
180.000	.0289	.0139	-.1858

ARC11-716 IA14 01+T12+S12M25+AT11 EXTERNAL TANK (RB1T35)

ALPHAT(3) = -.900 BETAT (4) = 4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0430	.7324	.2966	-.1901	-.3737	-.3418	-.2232	-.1022	-.0768	-.1258	-.1153	-.0926	-.0645	-.0527	-.0452
30.000			.2413	-.2323	-.3781	-.3304	-.1865	-.0608	-.0322	-.1433	-.1371	-.0916	-.0606	-.0534	-.0428
60.000			.2161	-.2531	-.3377	-.2695	-.1078	.0460	.0488	-.3422	-.3273	-.1472	-.0745	-.0532	-.0410
90.000		.6634	.2139	-.2558	-.3107	-.2136	-.0043	.2043	.3502		-.3874	-.0315	-.1067	-.1115	-.0635
120.000			.2306	-.2534	-.3094	-.2362	-.0713	.0928	.1541	-.1614	-.0930	-.0926	-.1138	-.0977	-.0501
135.000								.0422		.0127		-.1488		-.1234	
150.000			.2691	-.1959	-.3216	-.2638	-.1350	.0178	.0966	.1311	-.2136	-.4055	-.3270	-.2403	-.1246
165.000				-.1698	-.3182	-.2739	-.1445	-.0067	.0906	.1951	-.0039	-.3182	-.1679	-.1269	-.0648
180.000	1.0430	.7995	.3387	-.1487	-.3057	-.2698	-.1329	-.0036	.0919	.1957	.1163	-.4056	-.1716	-.1595	-.0656
270.000		.8807							.3124						
X/LT	.7460	.8530	.9280												
PHI															
.000	-.0496	-.0942	-.4251												
30.000	-.0409	-.0748	-.4174												
60.000	-.0312	-.0463	-.2535												
90.000	-.0180	-.0228													
120.000	-.0059	-.0754	-.0336												
135.000	-.0028	-.0302	-.1171												
150.000	-.0727	-.1000	-.2524												
165.000	.0016	-.0152	.0119												
180.000	-.0047	-.0146	-.2292												

ALPHAT(3) = -.900 BETAT (5) = 8.180

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9809	.5722	.2573	-.2212	-.4078	-.3794	-.2609	-.1446	-.1186	-.1599	-.1510	-.1260	-.1040	-.0937	-.0907
30.000			.1575	-.3075	-.4119	-.3513	-.2071	-.0742	-.0372	-.1371	-.1470	-.1082	-.0791	-.0712	-.0629
60.000			.1143	-.3373	-.3564	-.2708	-.0990	.0624	.0707	-.3224	-.2788	-.1551	-.0823	-.0624	-.0488
90.000		.5398	.0946	-.3342	-.3138	-.2092	.0045	.2128	.3714		-.3490	-.0593	-.1374	-.1436	-.1029
120.000			.1190	-.3109	-.3279	-.2469	-.0689	.0976	.1608	-.1647	-.1316	-.1267	-.1907	-.1452	-.0995
135.000								.0412		-.0063		-.1916		-.1671	
150.000			.1775	-.2787	-.3551	-.2950	-.1509	.0009	.0885	.0852	-.3373	-.4436	-.3886	-.2435	-.1723
165.000				-.2223	-.3491	-.3059	-.1726	-.0391	.0560	.1350	-.0606	-.3446	-.2119	-.2105	-.1159
180.000	.9809	.6780	.3088	-.1758	-.3260	-.2903	-.1551	-.0433	.0523	.1490	.0777	-.3340	-.2739	-.2298	-.1296
270.000		.9743							.3084						
X/LT	.7460	.8530	.9280												
PHI															

ARC11-716 IA14 01+T12+S12N25+AT11 EXTERNAL TANK (RB1735)

ALPHAT(3) = -.900 BETAT (5) = 8.180

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0960	-.1366	-.4481
30.000	-.0629	-.0885	-.4074
60.000	-.0529	-.0684	-.2488
90.000	-.0701	-.0711	
120.000	-.0417	-.0867	-.0592
135.000	-.0364	-.0428	-.1343
150.000	-.1236	-.1376	-.2453
165.000	-.0497	-.0534	.0032
180.000	-.0706	-.0766	-.2406

ALPHAT(4) = 3.980 BETAT (1) = -8.200

SECTION (1)EXTERNA TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1760	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9681	.7865	.3849	-.1082	-.3326	-.3214	-.2308	-.1078	-.0755	-.1029	-.0086	-.0879	-.0810	-.0834	-.0796
30.000			.5167	.0185	-.2350	-.2324	-.1475	-.0459	-.0366	-.1168	-.0787	-.0571	-.0453	-.0507	-.0411
60.000			.5825	.0654	-.1494	-.1325	-.0321	.0946	.0872	-.2051	-.1106	-.0238	-.0093	-.0017	.0064
90.000		.9521	.5492	.0907	-.1450	-.1140	.0373	.1983	.2909		- 5773	-.0414	-.0369	-.0382	-.0103
120.000			.4337	-.0525	-.2350	-.2207	-.1078	-.0063	-.0366	-.2118	-.2443	.0367	.0117	.0069	.0483
135.000								-.0578		-.0087		-.0064		-.0121	
150.000			.3174	-.1611	-.3357	-.3087	-.2013	-.0755	-.0282	.1690	.0764	-.1099	-.1524	-.1022	-.0227
165.000				-.2262	-.3732	-.3350	-.2026	-.0747	.0103	.1830	.1020	-.1256	-.1214	-.1112	.0035
180.000	.9481	.6550	.1830	-.2704	-.3694	-.3263	-.1663	-.0401	.0430	.1710	.0740	-.3993	-.1745	-.1436	-.0416
270.000		.5193							.3566						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0817	-.1251	-.4316
30.000	-.0364	-.0626	-.3872
60.000	.0172	.0200	-.1450
90.000	.0198	-.0264	
120.000	.1224	.0832	.1598
135.000	.1316	.1308	.1587
150.000	.0808	.0858	.0726
165.000	.1024	.1092	.2106
180.000	.0687	.0729	-.0864

ARC11-716 IA14 01+T12+S12N25+AT11 EXTERNAL TANK (RB1T35)

ALPHAT(4) = 3.980 BETAT (2) = -4.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0300	.8553	.4367	-.0522	-.3034	-.2891	-.1841	-.0638	-.0290	-.0566	-.0584	-.0472	-.0472	-.0403	-.0303
30.000			.4829	-.0248	-.2605	-.2514	-.1491	-.0224	-.0048	-.0996	-.0562	-.0419	-.0366	-.0371	-.0245
60.000			.4842	-.0130	-.2171	-.1844	-.0554	.0863	.1039	-.2707	-.0990	-.0438	-.0429	-.0540	-.0119
90.000		.8574	.4311	-.0574	-.2259	-.1602	.0076	.1824	.2961		-.5573	-.0969	-.0801	-.0567	-.0235
120.000			.3462	-.1281	-.2792	-.2371	-.1129	.0089	-.0064	-.2319	-.2272	-.0464	-.0489	-.0356	.0091
135.000								-.0277		-.0114		-.0980		-.0495	
150.000			2818	-.1969	-.3317	-.2984	-.1694	-.0371	.0123	.1589	.0598	-.2018	-.1715	-.1306	-.0374
165.000				-.2251	-.3525	-.3096	-.1702	-.0306	.0519	.1921	.0984	-.1981	-.1459	-.1068	.0052
180.000	1.0300	.6669	.2143	-.2527	-.3541	-.3018	-.1507	-.0098	.0693	.1903	.1065	-.4597	-.1422	-.1100	-.0161
270.000		.6467							.3303						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0298	-.0756	-.3967
30.000	-.0156	-.0440	-.3685
60.000	.0036	.0033	-.1982
90.000	.0196	.0301	
120.000	.0877	.0393	.1169
135.000	.0909	.0947	.1078
150.000	.0611	.0647	.0148
165.000	.0902	.0899	.1445
180.000	.0758	.0680	-.1145

ALPHAT(4) = 3.960 BETAT (3) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0490	.8755	.4417	-.0587	-.2870	-.2786	-.1750	-.0514	-.0163	-.0542	-.0518	-.0364	-.0334	-.0215	-.0180
30.000			.4836	-.0774	-.2916	-.2724	-.1517	-.0267	.0112	-.0855	-.0661	-.0390	-.0338	-.0346	-.0233
60.000			.3770	-.1105	-.2738	-.2308	-.0851	.0777	.1210	-.2687	-.0976	-.0390	-.0313	-.0463	-.0309
90.000		.7570	.3131	-.1574	-.2714	-.1998	-.0097	.1774	.3065		-.5231	-.1104	-.1045	-.0884	-.0338
120.000			.2584	-.2110	-.3027	-.2471	-.0948	.0311	.0338	-.2356	-.2245	-.1141	-.0979	-.0686	-.0121
135.000								.0008		-.0128		-.1287		-.0676	
150.000			.2333	-.2351	-.3405	-.2836	-.1548	-.0118	.0461	.1352	-.1349	-.2734	-.2038	-.1502	-.0779
165.000				-.2398	-.3457	-.2898	-.1506	-.0184	.0713	.1918	.0465	-.2385	-.1419	-.1085	-.0199
180.000	1.0490	.6688	.2172	-.2458	-.3506	-.2687	-.1398	-.0116	.0794	.1870	.1237	-.4381	-.1310	-.0852	-.0087
270.000		.7632							.3110						

X/LT	.7480	.8530	.9280
PHI			

AP211-716 IA14 01*T12+S12N2J+AT11 EXTERNAL TANK (R81T35)

ALPHA(6) = 3.980 BETA (3) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L	.7460	.8530	.9280
PHI			
.000	-.0142	-.0562	-.3835
30.000	-.0147	-.0406	-.3789
60.000	-.0082	-.0138	-.2177
90.000	.0110	-.0045	
120.000	.0576	.0001	.0537
135.000	.0581	.0460	-.0012
150.000	.0091	.0094	-.1093
165.000	.0607	.0511	.0401
180.000	.0683	.0543	-.1767

ALPHA(6) = 3.980 BETA (6) = 5.130

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L	.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0000	.8362	.4190	-.0837	-.3097	-.3362	-.1992	-.0776	-.0449	-.0765	-.0718	-.0607	-.0528	-.0518	-.0400
30.000			.3132	-.1706	-.3550	-.3278	-.1854	-.0501	-.0054	-.0675	-.0843	-.0610	-.0569	-.0534	-.0424
60.000			.2279	-.2488	-.3370	-.2714	-.1377	.0705	.1288	-.2525	-.1035	-.0458	-.0587	-.0524	-.0453
90.000		.6163	.1681	-.2647	-.3175	-.2195	-.0118	.1573	.3340		-.4468	-.1053	-.1052	-.0814	-.0366
120.000			.1411	-.3056	-.3029	-.1570	-.0139	.0609	.0759	-.2118	-.2321	-.1709	-.1277	-.0890	-.0339
135.000								.0212		-.0208		-.1675		-.1108	
150.000			.1563	-.3034	-.3474	-.2683	-.1437	.0047	.0666	.0973	-.2459	-.4046	-.3214	-.2115	-.1027
165.000				-.2810	-.3677	-.3112	-.1716	-.0238	.0634	.1550	-.0265	-.2779	-.1659	-.1288	-.0606
180.000	1.0160	.6688	.1988	-.3420	-.3623	-.2193	-.1674	-.0423	.0505	.1663	.0753	-.3329	-.1784	-.1564	-.0688
270.000		.8927							.2381						

X/L	.7460	.8530	.9280
PHI			
.000	-.0441	-.0834	-.4040
30.000	-.0404	-.0638	-.3911
60.000	-.0410	-.0429	-.2480
90.000	-.0073	-.0116	
120.000	.0235	-.0167	-.0078
135.000	.0113	.0068	-.1026
150.000	-.0461	-.0723	-.2348
165.000	.0168	.0057	-.0[illegible]
180.000	.0139	.0000	-.2195

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T35)

ALPHAT(4) = 3.980 BETAT (5) = 8.220

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9636	.7848	.3898	-.1037	-.3305	-.3222	-.2267	-.1120	-.0792	-.1114	-.1029	-.0925	-.0843	-.0813	-.0719
30.000			.2401	-.2357	-.3963	-.3519	-.2233	-.0768	-.0205	-.1058	-.1087	-.0845	-.0762	-.0786	-.0616
60.000			.1345	-.3138	-.3664	-.2873	-.1088	.0754	.1438	-.2477	-.1074	-.0555	-.0634	-.0672	-.0568
90.000		.5185	.0843	-.3389	-.3180	-.2150	.0010	.1985	.3579		-.3609	-.0832	-.0978	-.0793	-.0451
120.000			.0717	-.3468	-.3243	-.2451	-.0679	.0810	.0992	-.2017	-.2416	-.1990	-.1580	-.1111	-.0535
135.000								.0349		-.0211		-.1939		-.1527	
150.000			.0942	-.3466	-.3526	-.2902	-.1411	.0072	.0740	.0742	-.3183	-.4250	-.3385	-.2298	-.1444
165.000				-.3112	-.3786	-.3186	-.1741	-.0453	.0474	.1270	-.0557	-.2996	-.2107	-.1956	-.0983
180.000	.9636	.5489	.1789	-.2795	-.3836	-.3290	-.1791	-.0696	.0297	.1249	.0564	-.3167	-.2650	-.2203	-.1134
270.000		.9594							.2934						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0840	-.1206	-.4290
30.000	-.0633	-.0848	-.3999
60.000	-.0492	-.0523	-.2537
90.000	-.0111	-.0109	
120.000	-.0026	-.0301	.0010
135.000	-.0108	-.0075	-.0996
150.000	-.0806	-.0973	-.2185
165.000	-.0251	-.0242	.0326
180.000	-.0488	-.0519	-.2360

ALPHAT(5) = 7.990 BETAT (1) = -8.200

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9142	.8708	.4959	.0032	-.2687	-.2747	-.2038	-.0703	-.0318	-.0572	-.0604	-.0615	-.0572	-.0615	-.0582
30.000			.6207	.1284	-.1599	-.1721	-.0964	.0219	.0424	-.0413	-.0134	-.0068	-.0057	-.0097	-.0058
60.000			.6333	.1497	-.1125	-.1025	.0048	.1471	.1827	-.1386	-.0097	.0406	.0272	.0153	.0200
90.000		.8954	.5111	.0380	-.1809	-.1425	.0003	.1500	.2053		-.3188	.0138	-.0247	-.0242	.0150
120.000			.3310	-.1420	-.3247	-.3011	-.1953	-.1177	-.1675	-.2553	-.5365	.0219	.0387	.0253	.0544
135.000								-.1519		-.0687		-.0457		.0050	
150.000			.1927	-.2683	-.4238	-.3828	-.2679	-.1498	-.1038	.1123	.0103	-.1642	-.1242	-.0865	-.0097
165.000				-.3470	-.4416	-.3862	-.2357	-.1053	-.0215	.1411	.0815	-.1253	-.0926	-.0934	.0210
180.000	.9142	.5255	.0709	-.3771	-.4201	-.3566	-.1785	-.0412	.0321	.1524	.0681	-.3919	-.1523	-.1217	-.0194
270.000		.4642							.2728						

X/LT	.7480	.8530	.9280
PHI			

ARC11-716 IA14 OL+T12+S12N25+AT11 EXTERNAL TANK (RB1T35)

ALPHAT(5) = 7.390 BETAT (1) = -3.200

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0587	-.1004	-.4118
30.000	.0040	-.0250	-.3562
60.000	.0363	.0430	-.1692
90.000	.0623	.0133	
120.000	.1379	.1094	.1541
135.000	.1521	.1566	.1774
150.000	.0999	.1099	.1019
165.000	.1206	.1255	.2254
180.000	.0902	.0901	-.0811

ALPHAT(5) = 8.030 BETAT (2) = -4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9700	.9446	.5477	.0432	-.2227	-.2251	-.1387	-.0263	.0121	-.0095	-.0180	-.0109	-.0122	-.0065	-.0076
30.000			.5812	.0788	-.1827	-.1853	-.0926	.0251	.0608	-.0250	-.0091	.0057	.0016	-.0002	.0103
60.000			.5231	.0293	-.1853	-.1660	-.0381	.1225	.1876	-.1427	-.0345	.0301	.0106	.0016	.0045
90.000		.7972	.3926	-.0775	-.2486	-.1993	-.0289	.1362	.2052		-.2695	.0141	-.0507	-.0437	-.0095
120.000			.2478	-.1175	-.3402	-.3057	-.1810	-.0906	-.1286	-.2448	-.5302	-.0543	-.0123	-.0097	.0223
135.000								-.1014		-.0384		-.1290		-.0305	
150.000			.1548	-.2941	-.3982	-.3606	-.2135	-.0961	-.0442	.1204	.0085	-.2274	-.1624	-.1075	-.0243
165.000				-.3291	-.3992	-.3395	-.1855	-.0604	.0280	.1595	.0828	-.1879	-.1223	-.0707	.0126
180.000	.9700	.5404	.0830	-.3457	-.3857	-.3158	-.1543	-.0261	.0579	.1748	.1112	-.4357	-.1213	-.0892	-.0064
270.000		.5878							.2427						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0117	-.0482	-.3719
30.000	.0110	-.0116	-.3505
60.000	.0141	.0189	-.1946
90.000	.0442	.0231	
120.000	.1039	.0830	.1045
135.000	.1087	.1232	.0977
150.000	.0775	.0867	.0193
165.000	.1104	.1085	.1524
180.000	.0943	.0880	-.1081

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T35)

ALPHAT(5) = 8.040 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9914	.9611	.5528	.0538	-.2068	-.2157	-.1240	-.0123	.0291	-.0040	-.0028	-.0009	.0010	.0081	.0090
30.000			.5083	.0086	-.2380	-.2292	-.1193	.0061	.0587	-.0239	-.0170	-.0064	-.0018	-.0079	-.0034
60.000			.4019	-.0853	-.2716	-.2269	-.0779	.0963	.1309	-.1463	-.0467	.0148	.0000	-.0037	-.0107
90.000		.6925	.2760	-.1856	-.3046	-.2271	-.0449	.1370	.2188		-.2320	.0062	-.0462	-.0566	-.0178
120.000			.1701	-.2788	-.3525	-.2895	-.1477	-.0448	-.0717	-.2309	-.4851	-.1209	-.0491	-.0415	.0025
135.000								-.0514		-.0181		-.1519		-.0509	
150.000			.1249	-.3227	-.3832	-.3295	-.1807	-.0440	.0026	.1107	-.0968	-.2548	-.1757	-.1295	-.0549
165.000				-.3275	-.3832	-.3139	-.1694	-.0280	.0535	.1737	.0478	-.2318	-.1184	-.0835	-.0025
180.000	.9914	.5418	.1043	-.3397	-.3803	-.3093	-.1525	-.0219	.0624	.1763	.1307	-.4403	-.1117	-.0677	.0146
270.000		.7016							.2243						

X/LT	.7460	.8530	.9280
PHI			
.000	.0067	-.0349	-.3509
30.000	.0022	-.0197	-.3459
60.000	.0030	-.0032	-.2133
90.000	.0321	.0133	
120.000	.0780	.0414	.0409
135.000	.0786	.0770	.0100
150.000	.0267	.0414	-.0841
165.000	.0810	.0766	.0805
180.000	.0880	.0794	-.1569

ALPHAT(5) = 8.030 BETAT (4) = 4.130

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9736	.9344	.5355	.0311	-.2281	-.2352	-.1490	-.0240	.0119	-.0222	-.0222	-.0195	-.0106	-.0205	-.0035
30.000			.4156	-.0789	-.3004	-.2863	-.1649	-.0248	.0306	-.0509	-.0547	-.0403	-.0340	-.0435	-.0266
60.000			.2790	-.2027	-.3377	-.2759	-.1168	.0775	.1834	-.1338	-.0664	-.0080	-.0179	-.0179	-.0127
90.000		.5825	.1561	-.2929	-.3366	-.2522	-.0503	.1455	.2324		-.2266	.0062	-.0438	-.0511	-.0106
120.000			.0878	-.3511	-.3455	-.2774	-.1192	-.0060	-.0216	-.2060	-.4279	-.1504	-.0912	-.0606	-.0113
135.000								-.0137		-.0188		-.1732		-.0767	
150.000			.0776	-.3574	-.3620	-.3012	-.1545	-.0155	.0381	.1036	-.2312	-.3387	-.2545	-.1784	-.0857
165.000				-.3519	-.3766	-.3157	-.1653	-.0343	.0533	.1593	-.0140	-.2748	-.1299	-.0812	-.0190
180.000	.9736	.5467	.0886	-.3527	-.3830	-.3319	-.1671	-.0454	.0415	.1525	.1216	-.3637	-.1254	-.1068	-.0279
270.000		.8132							.2159						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T35)

ALPHAT(5) = 8.030 BETAT (4) = 4.130

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0140	-.0508	-.3692
30.000	-.0235	-.0453	-.3711
60.000	-.0124	-.0128	-.2207
90.000	.0108	.0082	
120.000	.0499	.0160	-.0075
135.000	.0499	.0385	-.0905
150.000	.0024	-.0209	-.2154
165.000	.0511	.0383	.0291
180.000	.0550	.0333	-.2050

ALPHAT(5) = 8.020 BETAT (5) = 8.270

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9057	.8725	.4966	.0172	-.2561	-.2563	-.1807	-.0722	-.0275	-.0642	-.0568	-.0607	-.0578	-.0515	-.0511
30.000			.3045	-.1612	-.3727	-.3366	-.2265	-.0922	-.0067	-.0777	-.0905	-.0850	-.0745	-.0761	-.0781
60.000			.1392	-.3074	-.3965	-.3260	-.1473	.0501	.1897	-.1164	-.0764	-.0314	-.0207	-.0281	-.0285
90.000		.4527	.0436	-.3740	-.3488	-.2405	-.0324	.1565	.2681		-.2431	.0083	-.0322	-.0546	-.0311
120.000			.0105	-.3908	-.3410	-.2441	-.0830	.0441	.0267	-.2012	-.3699	-.1648	-.1102	-.0956	-.0433
135.000								.0277		-.0289		-.1799		-.1262	
150.000			.0172	-.3929	-.3664	-.2761	-.1296	.0083	.0546	.0785	-.2702	-.4236	-.2745	-.2003	-.1102
165.000				-.3929	-.3997	-.3208	-.1705	-.0364	.0413	.1303	-.0581	-.2484	-.1740	-.1675	-.0785
180.000	.9057	.4482	.0648	-.3737	-.4126	-.3478	-.1873	-.0691	.0056	.1193	.0534	-.2788	-.2176	-.2005	-.0838
270.000		.9015							.2146						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0522	-.0970	-.4065
30.000	-.0626	-.0859	-.3893
60.000	-.0177	-.0241	-.2038
90.000	.0025	.0058	
120.000	.0228	.0045	-.0028
135.000	.0151	.0210	-.0905
150.000	-.0480	-.0627	-.2043
165.000	.0074	.0105	.0588
180.000	-.0201	-.0189	-.2175

ARC11-716 IA14 01+712+S12N25+AT11 EXTERNAL TANK (R81T36) (14 FEB 74)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES
LREF = 38.7090 INCHES YMRP = .0000 INCHES
BREF = 38.7090 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = .850 ELEVON = .000
RUDDER = .000 SPDBRK = .000

ALPHAT(1) = -8.570 BETAT (1) = -8.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9408	.5136	.0925	-.3950	-.5875	-.3785	-.2234	-.1124	-.1042	-.1741	-.2341	-.1696	-.1018	-.0833	-.0690
30.000			.1905	-.3069	-.5392	-.5062	-.2932	-.2056	-.2418	-.3227	-.3837	-.2007	-.1174	-.0940	-.0810
60.000			.3572	-.1414	-.3808	-.3386	-.2281	-.1462	-.2632	-.5499	-.6937	-.2636	-.0421	-.0085	-.0110
90.000		.9293	.5418	.0453	-.2041	-.1571	.0251	.1885	.2316		-.6930	-.6029	-.1883	-.0781	-.0548
120.000			.6685	.1715	-.1086	-.0869	.0418	.2250	.3191	.0432	.0747	.0088	-.0261	-.0084	.0386
135.000								.1827		.2049		-.0369		-.0291	
150.000			.6930	.1919	-.1051	-.1021	.0019	.1500	.2303	.3470	.2409	-.1518	-.2106	-.1488	-.0450
165.000				.1466	-.1467	-.1480	-.0368	.0988	.2010	.3335	.2081	-.2488	-.1860	-.1587	-.0334
180.000	.9408	1.0000	.5776	.0790	-.1942	-.1979	-.0662	.0620	.1751	.3002	.1452	-.5770	-.2354	-.2100	-.0774
270.000		.5164							.2621						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0694	-.1113	-.3833
30.000	-.0942	-.1066	-.3190
60.000	-.0505	-.0815	-.1826
90.000	-.1385	-.3110	
120.000	.0806	-.1239	.2188
135.000	.0880	.0176	.2129
150.000	.0240	.0278	.0362
165.000	.0391	.0354	.2675
180.000	.0024	.0031	-.0155

ALPHAT(1) = -8.540 BETAT (2) = -4.040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9932	.5611	.1286	-.3776	-.4727	-.3557	-.1843	-.0739	-.0670	-.1514	-.2345	-.1575	-.0660	-.0376	-.0398
30.000			.1766	-.3217	-.5062	-.4047	-.2293	-.1264	-.1549	-.2602	-.3827	-.1926	-.0893	-.0602	-.0496
60.000			.2835	-.2191	-.4165	-.3339	-.1906	-.1008	-.2066	-.4845	-.6737	-.3416	-.0613	-.0179	-.0116
90.000		.8423	.4322	-.0718	-.2872	-.2138	-.0005	.1744	.2313		-.6435	-.6708	-.2049	-.0784	-.0375
120.000			.5655	.0623	-.1993	-.1564	.0131	.1945	.3138	.0281	.0129	-.0829	-.1021	-.0468	.0090
135.000								.1565		.1782		-.1227		-.0675	
150.000			.6340	.1269	-.1584	-.1432	-.0230	.1367	.2312	.3134	.0363	-.2350	-.2494	-.1575	-.0641

AR011-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T36)

ALPHAT(1) = -8.540 BETAT (2) = -4.040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
165.000				.1292	-.1647	-.1530	-.0315	.1108	.2147	.3352	.1634	-.4753	-.2239	-.1409	-.0287
180.000	.9952	1.0250	.6056	.0973	-.1873	-.1732	-.0369	.1000	.2003	.3224	.1670	-.6479	-.2062	-.1440	-.0535
270.000		.6304							.2366						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0457	-.0907	-.3785
30.000	-.0514	-.0736	-.3458
60.000	-.0328	-.0514	-.1898
90.000	-.0532	-.1404	
120.000	.0515	-.1756	.1614
135.000	.0501	-.0352	.1301
150.000	-.0036	-.0269	-.0268
165.000	.0323	.0021	.2025
180.000	.0167	-.0150	-.0467

ALPHAT(1) = -8.480 BETAT (3) = -.020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0180	.5787	.1357	-.3672	-.4445	-.3515	-.1772	-.0585	-.0573	-.1396	-.2355	-.1576	-.0516	-.0135	-.0102
30.000			.1513	-.3464	-.4674	-.3530	-.1810	-.0685	-.0854	-.2094	-.3374	-.2098	-.0608	-.0397	-.0338
60.000			.2147	-.2897	-.4233	-.3162	-.1428	-.0505	-.1442	-.4009	-.6379	-.3628	-.0683	-.0158	-.0110
90.000		.7458	.3177	-.1816	-.3557	-.2369	-.0098	.1744	.2286		-.6065	-.7430	-.2056	-.0563	-.0235
120.000			.4424	-.0463	-.2778	-.2214	-.0268	.1691	.3127	.0270	-.0472	-.1711	-.1484	-.0656	-.0095
135.000								.1259		.1557		-.2238		-.1000	
150.000			.5594	.0468	-.2267	-.1975	-.0800	.1127	.2265	.2866	-.0976	-.4703	-.3381	-.2043	-.1038
165.000				.0963	-.1978	-.1822	-.0732	.1066	.2168	.3269	.0928	-.5433	-.2513	-.1510	-.0427
180.000	1.0180	1.0250	.6144	.0998	-.1843	-.1698	-.0312	.1089	.2127	.3174	.1781	-.6513	-.2235	-.1414	-.0341
270.000		.7427							.2296						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0346	-.0853	-.3817
30.000	-.0385	-.0732	-.3624
60.000	-.0251	-.0472	-.2294
90.000	-.0282	-.0789	
120.000	.0203	-.1591	.0351
135.000	.0160	-.0598	-.0371
150.000	-.0531	-.0956	-.1370

ARC11-715 IA14 01+T12+S12N25+AT11 EXTERNAL TANK (RB1T36)

ALPHAT(1) = -8.480 BETAT (3) = -.020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
165.000	.0089	-.0439	.0595
180.000	.0100	-.0345	-.1497

ALPHAT(1) = -8.490 BETAT (4) = 4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9955	.5618	.1237	-.3740	-.5063	-.3652	-.1935	-.0753	-.0734	-.1533	-.2387	-.1614	-.0647	-.0372	-.0372
30.000			.1119	-.3886	-.4185	-.3170	-.1478	-.0351	-.0398	-.1668	-.2962	-.2017	-.0427	-.0211	-.0333
60.000			.1316	-.3662	-.4281	-.2318	-.1016	.0028	-.0845	-.3401	-.5981	-.3574	-.0495	-.0133	-.0170
90.000		.6344	.2024	-.2882	-.3751	-.2339	-.0100	.1786	.2571		-.5975	-.7143	-.1740	-.0504	-.0170
120.000			.3247	-.1685	-.3623	-.2682	-.0609	.1441	.3102	.0229	-.1017	-.2240	-.1665	-.0978	-.0376
135.000								.0805		.1178		-.2924		-.1459	
150.000			.4541	-.0457	-.3032	-.2588	-.1065	.0692	.1918	.2219	-.2546	-.5344	-.3577	-.2163	-.1163
165.000				.0408	-.2425	-.2175	-.0751	.0723	.1864	.2860	.0429	-.6581	-.2162	-.1472	-.0697
180.000	.9955	1.0180	.6021	.0898	-.1993	-.1772	-.0387	.0903	.1975	.2958	.1682	-.6607	-.2214	-.1863	-.0619
270.000		.8439							.2201						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0441	-.0862	-.3778
30.000	-.0420	-.0829	-.3711
60.000	-.0335	-.0670	-.2496
90.000	-.0208	-.0705	
120.000	-.0161	-.1397	-.0468
135.000	-.0234	-.0852	-.1491
150.000	-.1092	-.1626	- 2649
165.000	-.0242	-.0659	.0194
180.000	-.0217	-.0489	-.2016

AR(11-716 IA14 01+T12+S12N25+AT11 EXTERNAL TANK (RB1T36)

ALPHAT(1) = -8.520 BETAT (5) = 8.160

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9368	.5012	.0696	-.3998	-.5852	-.3734	-.2246	-.1148	-.1063	-.1761	-.2340	-.1701	-.1087	-.0864	-.0657
30.000			.0506	-.4381	-.3753	-.2932	-.1221	-.0104	-.0133	-.1414	-.2646	-.1986	-.0546	-.0357	-.0476
60.000			.0557	-.4309	-.3353	-.2281	-.0590	.0376	-.0315	-.2873	-.5760	-.3680	-.0398	-.0163	-.0311
90.000		.5173	.0951	-.3796	-.3540	-.2152	.0063	.1801	.2739		-.5874	-.6468	-.1594	-.0391	-.0303
120.000			.2072	-.2744	-.4181	-.2932	-.0842	.1217	.2988	.0214	-.1436	-.2571	-.2090	-.1538	-.0977
135.000								.0485		.0845		-.3450		-.2273	
150.000			.3503	-.1408	-.3821	-.3235	-.1570	.0152	.1542	.1442	-.3394	-.6224	-.4181	- 2663	-.1743
165.000				-.0116	-.2929	-.2646	-.1274	.0139	.1417	.2096	-.0199	-.6649	-.2621	-.2364	-.1369
180.000	.9368	.9189	.5725	.0701	-.2205	-.2036	-.0683	.0485	.1609	.2516	.1392	-.4817	-.3022	-.2715	-.1457
270.000		.9284							.2191						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0698	-.1084	-.3761
30.000	-.0639	-.0960	-.3807
60.000	-.0435	-.0736	-.2561
90.000	-.0394	-.1045	
120.000	-.0655	-.1721	-.0736
135.000	-.0662	-.1050	-.1768
150.000	-.1527	-.2133	-.2842
165.000	-.0785	-.1055	-.0319
180.000	-.1009	-.1145	-.2155

ALPHAT(2) = -4.300 BETAT (1) = -8.160

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0050	.6325	.2132	-.2898	-.5241	-.4051	-.2245	-.1083	-.1005	-.1769	-.2074	-.1311	-.0899	-.0816	-.0792
30.000			.3257	-.1814	-.4440	-.4053	-.2389	-.1332	-.1640	-.2677	-.3031	-.1446	-.1062	-.0885	-.0735
60.000			.4641	-.0494	-.3019	-.2738	-.1209	-.0185	-.0902	-.5643	-.5752	-.1943	-.0066	-.0020	-.0122
90.000		.9873	.5783	.0672	-.1808	-.1320	.0559	.2341	.3368		-.5646	-.5071	-.1170	-.0609	-.0436
120.000			.6216	.1174	-.1543	-.1262	.0238	.1778	.2342	-.1009	.0050	.0107	-.0292	-.0168	.0323
135.000								.1219		.1213		-.0415		-.0387	
150.000			.5893	.0797	-.2025	-.1861	-.0707	.0865	.1507	.2884	.1920	-.2028	-.2129	-.1437	-.0374
165.000				.0208	-.2574	-.2412	-.1006	.0401	.1346	.2844	.1759	-.2538	-.1847	-.1445	-.0229
180.000	1.0050	.9124	.4592	-.0445	-.2981	-.2683	-.1098	.0265	.1312	.2660	.1265	-.6050	-.2271	-.1875	-.0601
270.000		.5814							.3920						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T36)

ALPHAT(2) = -4.300 BETAT (1) = -8.160

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	-.0735	-.1047	-.3803
30.000	-.0714	-.0871	-.3471
60.000	-.0141	-.0242	-.1641
90.000	-.0572	-.1495	
120.000	.0998	-.0301	.2450
135.000	.1110	.0825	.2430
150.000	.0588	.0825	.1080
165.000	.0733	.0890	.2832
180.000	.0427	.0525	.0016

ALPHAT(2) = -4.290 BETAT (2) = -4.060

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0630	.6865	.2492	-.2706	-.5039	-.3767	-.1924	-.0640	-.0591	-.1579	-.1854	-.1157	-.0544	-.0375	-.0341
30.000			.3039	-.2135	-.4516	-.3731	-.1919	-.0736	-.0908	-.2325	-.2748	-.1513	-.0694	-.0614	-.0447
60.000			.3868	-.1321	-.3528	-.2915	-.1006	.0139	-.0478	-.4842	-.5560	-.2541	-.0269	-.0051	-.0105
90.000		.9022	.4666	-.0444	-.2634	-.1785	.0315	.2302	.3422		-.5573	-.6106	-.1044	-.0431	-.0205
120.000			.5212	.0105	-.2361	-.1868	.0011	.1667	.2457	-.1210	-.0502	-.0831	-.0907	-.0652	-.0015
135.000								.1172		.1074		-.1381		-.0804	
150.000			.5411	.0266	-.2373	-.2084	-.0660	.0923	.1700	.2665	.0321	-.2425	-.2415	-.1629	-.0634
165.000				.0027	-.2603	-.2286	-.0801	.0675	.1574	.2901	.1476	-.4541	-.2135	-.1465	-.0222
180.000	1.0630	.9353	.4916	-.0320	-.2785	-.2108	-.0771	.0649	.1546	.2783	.1543	-.6679	-.1938	-.1403	-.0433
270.000		.6946							.3677						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0415	-.0741	-.3575
30.000	-.0388	-.0556	-.3392
60.000	-.0092	-.0109	-.1859
90.000	-.0118	-.0595	
120.000	.0656	-.0769	.1830
135.000	.0692	.0435	.1730
150.000	.0231	.0371	.0397
165.000	.0534	.0622	.2073
180.000	.0407	.0366	-.0319

ARC11-716 IA14 D1+T12+S12N25+AT11 EXTERNAL TANK (RB1T36)

ALPHAT(2) = -4.270 BETAT (3) = .030

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0810	.7015	.2517	-.2613	-.4851	-.3556	-.1790	-.0550	-.0448	-.1343	-.1874	-.1225	-.0517	-.0249	-.0169
30.000			.2604	-.2528	-.4473	-.3412	-.1631	-.0395	-.0425	-.1884	-.2520	-.1612	-.0410	-.0332	-.0370
60.000			.2994	-.2187	-.3716	-.3028	-.0903	.0399	-.0021	-.3997	-.5516	-.3090	-.0213	-.0128	-.0164
90.000		.8062	.3564	-.1576	-.3199	-.2119	.0253	.2289	.3585		-.5475	-.5533	-.0837	-.0197	-.0107
120.000			.4190	-.0940	-.2991	-.2197	-.0241	.1605	.2558	-.1167	-.1070	-.1428	-.1414	-.0788	-.0153
135.000								.1100		.0900		-.2125		-.1036	
150.000			.4730	-.0473	-.2890	-.2351	-.0774	.0893	.1797	.2305	-.1138	-.4582	-.3036	-.2001	-.1010
165.000				-.0210	-.2852	-.2439	-.0771	.0667	.1682	.2835	.0776	-.5601	-.2425	-.1536	-.0438
180.000	1.0810	.9382	.4980	-.0207	-.2824	-.2412	-.0655	.0734	.1687	.2734	.1594	-.6965	-.2169	-.1433	-.0312
270.000		.8052							.3496						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0212	-.0604	-.3483
30.000	-.0274	-.0509	-.3306
60.000	-.0119	-.0233	-.2025
90.000	.0017	-.0285	
120.000	.0339	-.1014	.0750
135.000	.0283	-.0123	-.0091
150.000	-.0264	-.0439	-.1322
165.000	.0252	.0007	.0316
180.000	.0293	.0086	-.1548

ALPHAT(2) = -4.280 BETAT (4) = 4.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0600	.6793	.2357	-.2745	-.4639	-.3743	-.1997	-.0762	-.0640	-.1558	-.1885	-.1231	-.0619	-.0405	-.0393
30.000			.2072	-.3021	-.4455	-.3256	-.1479	-.0219	-.0157	-.1974	-.2251	-.1166	-.0574	-.0483	-.0401
60.000			.2331	-.3003	-.3904	-.2540	-.0770	.0569	.0428	-.4434	-.5690	-.2165	-.0452	-.0296	-.0219
90.000		.6898	.2491	-.2670	-.3499	-.2126	.0214	.2319	.3729		-.5607	-.1205	-.0192	-.0683	-.0650
120.000			.3052	-.1999	-.3519	-.2459	-.0364	.1534	.2627	-.1126	-.1228	-.1539	-.1349	-.0855	-.0302
135.000								.0953		.0680		-.2337		-.1324	
150.000			.3889	-.1260	-.3446	-.2710	-.1052	.0602	.1537	.1885	-.1477	-.5162	-.3602	-.2265	-.1037
165.000				-.0634	-.3161	-.2657	-.1060	.0423	.1534	.2568	.0224	-.6027	-.2005	-.1389	-.0636
180.000	1.0600	.9319	.4850	-.0311	-.2924	-.2497	-.0866	.0502	.1574	.2578	.1483	-.6895	-.2031	-.1832	-.0615
270.000		.9047							.3343						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 OB+T12+S12NBS+AT11 EXTERNAL TANK (RB1T36)

ALPHA(2) = -4.280 BETA (4) = 4.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	-.0393	-.0758	-.3607
30.000	-.0325	-.0624	-.3496
60.000	-.0126	-.0300	-.1921
90.000	-.0284	-.0403	
120.000	.0013	-.0966	-.0274
135.000	.0010	-.0354	-.1073
150.000	-.0652	-.1077	-.2317
165.000	.0067	-.0108	.0347
180.000	.0106	-.0015	-.1841

ALPHA(2) = -4.280 BETA (5) = 8.150

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0300	.0380	.0490	.1130	.1730	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0010	.6222	.2026	-.2982	-.5315	-.4065	-.2340	-.1163	-.1055	-.1747	-.2035	-.1376	-.0895	-.0815	-.0830
30.000			.1354	-.3622	-.4846	-.2849	-.1453	-.0166	.0017	-.1716	-.2164	-.1171	-.0647	-.0564	-.0610
60.000			.1160	-.3861	-.3549	-.2317	-.0492	.0962	.0745	-.3887	-.5939	-.2053	-.0570	-.0523	-.0398
90.000		.5795	.1343	-.3563	-.3300	-.1868	.0447	.2304	.3963		-.5299	-.1009	-.0241	-.1065	-.1104
120.000			.1986	-.2956	-.3830	-.2543	-.0415	.1465	.2578	-.1140	-.1778	-.1728	-.1376	-.1411	-.0910
135.000								.0762		.0503		-.2770		-.1949	
150.000			.2906	-.2138	-.3997	-.3090	-.1364	.0359	.1508	.1415	-.3462	-.5555	-.3760	-.2409	-.1427
165.000				-.1222	-.3502	-.3069	-.1410	-.0021	.1190	.1912	-.0392	-.5801	-.2356	-.2269	-.1194
180.000	1.0010	.6488	.4572	-.0533	-.3115	-.2760	-.1124	.0076	.1195	.2132	.1191	-.4792	-.2889	-.2616	-.1272
270.000		.9922							.3267						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0755	-.1084	-.3780
30.000	-.0543	-.0735	-.3522
60.000	-.0360	-.0488	-.1814
90.000	-.1011	-.1099	
120.000	-.0445	-.1184	-.0563
135.000	-.0565	-.0470	-.1332
150.000	-.1146	-.1411	-.2402
165.000	-.0444	-.0481	.0168
180.000	-.0633	-.0648	-.1835

ARC11-715 IA14 O6+T12+S12N25+A11 EXTERNAL TANK (R81T36)

ALPHAT(3) = -.550 BETAT (1) = -9.160

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0280	.7502	.3144	-.2020	-.4715	-.4077	-.2260	-.0998	-.0828	-.1600	-.1806	-.1336	-.0926	-.0835	-.0773
30.000			.4330	-.0822	-.3687	-.3529	-.2002	-.0774	-.0909	-.2326	-.2241	-.1258	-.0825	-.0757	-.0528
60.000			.5413	.0250	-.2494	-.2177	-.0712	.0615	.0311	-.5950	-.5207	-.0762	.0221	.0016	.0003
90.000		1.0087	.5961	.0794	-.1815	-.1261	.0722	.2510	.3748		-.6152	.0476	.0278	-.0301	-.0102
120.000			.5654	.0564	-.2080	-.1743	-.0174	.1219	.1421	.1867	-.0952	.0607	.0021	-.0138	.0305
135.000								.0588		.0603		-.0139		-.0337	
150.000			.4919	-.0225	-.2824	-.2565	-.1235	.0316	.0731	.2375	.1578	-.1941	-.1950	-.1294	-.0288
165.000				-.0937	-.3451	-.3062	-.1480	.0034	.0847	.2495	.1649	-.2134	-.1626	-.1333	-.0059
180.000	1.0280	.6232	.3577	-.1493	-.3705	-.3123	-.1333	.0093	.0990	.2420	.1181	-.5162	-.2064	-.1823	-.0433
270.000		.5936							.4423						
X/LT	.7480	.8530	.9280												
PHI															
.000	-.0708	-.0987	-.3482												
30.000	-.0417	-.0590	-.3150												
60.000	.0087	.0039	-.1671												
90.000	.0295	-.027*													
120.000	.1155	.0518	.2327												
135.000	.1253	.1315	.2419												
150.000	.0803	.1182	.1249												
165.000	.0998	.1252	.2965												
180.000	.0585	.0868	.0133												

ALPHAT(3) = -.550 BETAT (2) = -4.060

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	..40	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0850	.7873	.3488	-.1720	-.4132	-.3695	-.1883	-.0603	-.0420	-.1410	-.1415	-.0991	-.0568	-.0438	-.0348
30.000			.4014	-.1217	-.3839	-.3321	-.1690	-.0399	-.0414	-.2245	-.1981	-.0998	-.0584	-.0472	-.0327
60.000			.4520	-.0685	-.3090	-.2400	-.0748	.0705	.0601	-.6296	-.5229	-.1142	.0081	-.0038	-.0071
90.000		.9195	.4834	-.0376	-.2624	-.1863	.0532	.2442	.3826		-.6453	.0770	.0107	-.0638	-.0475
120.000			.4752	-.0409	-.2721	-.2056	-.0275	.1278	.1625	-.2745	-.1069	.0110	-.0535	-.0581	-.0053
135.000								.0804		.0382		-.0907		-.0739	
150.000			.4504	-.0719	-.3077	-.2588	-.1024	.0560	.1103	.2166	.0567	-.1877	-.2091	-.1600	-.0439
165.000				-.1031	-.3358	-.2824	-.1161	.0315	.1206	.2603	.1413	-.3597	-.1805	-.1494	-.0048
180.000	1.0890	.8425	.3858	-.1312	-.3500	-.2840	-.1050	.0426	.1268	.2495	.1456	-.6865	-.1730	-.1468	-.0338
270.000		.7155							.4141						
X/LT	.7480	.8530	.9280												
PHI															

ARC11-716 IA14 3I+T12+S12N25+AT11 EXTERNAL TANK (RB1T36)

ALPHAT(3) = -.530 BETAT (3) = -4.000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE C*

X/LT	.7460	.8330	.9200
PHI			
.000	-.0208	-.0579	-.3099
30.000	-.0170	-.0389	-.2914
60.000	.0099	.0079	-.1749
90.000	.0251	.0486	
120.000	.0755	.0102	.1336
135.000	.0837	.0890	.1532
150.000	.0524	.0713	.0323
165.000	.0881	.0958	.2147
180.000	.0669	.0747	-.0260

ALPHAT(3) = -.540 BETAT (3) = .020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1010	.8032	.3560	-.1698	-.4035	-.3563	-.1756	-.0411	-.0317	-.1336	-.1349	-.0839	-.0447	-.0274	-.0142
30.000			.3583	-.1670	-.3961	-.3355	-.1907	-.0153	-.0069	-.1949	-.1779	-.0935	-.0378	-.0378	-.0228
60.000			.3596	-.1629	-.3465	-.2586	-.0700	.0880	.0913	-.5949	-.5144	-.1324	-.0147	-.0121	-.0085
90.000		.8240	.3692	-.1482	-.3110	-.2130	.0422	.2499	.3983		-.6432	.0976	-.0352	-.1092	-.0748
120.000			.3753	-.1339	-.3125	-.2332	-.0264	.1349	.1931	-.2992	-.1269	-.0457	-.0935	-.0839	-.0240
135.000								.0826		.0251		-.1179		-.0875	
150.000			.3915	-.1244	-.3300	-.2640	-.0960	.0635	.1352	.1910	-.1287	-.3493	-.2994	-.1874	-.0880
165.000				-.1198	-.3404	-.2777	-.1030	.0439	.1357	.2491	.0820	-.4152	-.1884	-.1439	-.0294
180.000	1.1010	.8442	.3902	-.1221	-.3435	-.2744	-.0862	.0390	.1398	.2453	.1592	-.7084	-.1629	-.1266	-.0211
270.000		.8263							.3947						

X/LT	.7460	.8330	.9200
PHI			
.000	-.0191	-.0432	-.3101
30.000	-.0130	-.0296	-.2912
60.000	.0032	.0084	-.1613
90.000	.0065	.0300	
120.000	.0460	-.0277	.0509
135.000	.0511	.0348	.0240
150.000	.0038	.0069	-.0819
165.000	.0510	.0389	.0394
180.000	.0803	.0427	-.1458

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T3U)

ALPHAT(3) = -.530 BETAT (4) = 8.180

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0210	.7232	.3086	-.2048	-.4657	-.4095	-.2357	-.1100	-.0865	-.1728	-.1885	-.1393	-.1004	-.0880	-.0786
30.000			.2088	-.2969	-.4727	-.3956	-.1586	-.0187	.0113	-.1671	-.1919	-.1126	-.0766	-.0745	-.0539
60.000			.1632	-.3377	-.3881	-.2413	-.0378	.1280	.1307	-.5028	-.4170	-.1619	-.0735	-.0535	-.0368
90.000		.5928	.1447	-.3454	-.3111	-.1854	.0575	.2665	.4410		-.5700	.0257	-.1420	-.1869	-.1359
120.000			.1669	-.3223	-.3530	-.2289	-.0177	.1478	.2154	-.2373	-.1727	-.1393	-.1755	-.1459	-.0924
135.000								.0844		.0118		-.2262		-.1738	
150.000			.2281	-.2720	-.3901	-.2889	-.1129	.0498	.1426	.1255	-.3486	-.4813	-.3703	-.2413	-.1443
165.000				-.2105	-.3975	-.3149	-.1466	-.0057	.1004	.1758	-.0342	-.4 58	-.2194	-.2239	-.1112
180.000	1.0210	.7160	.3514	-.1577	-.3800	-.3154	-.1371	-.0183	.0817	.1825	.1104	-.4458	-.2719	-.2584	-.1244
270.000		1.0130							.3695						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0764	-.1037	-.3504
30.000	-.0459	-.0656	-.3203
60.000	-.0330	-.0427	-.1752
90.000	-.0761	-.0638	
120.000	-.0183	-.0520	-.0337
135.000	-.0150	-.0056	-.1018
150.000	-.0767	-.0919	-.2084
165.000	-.0149	-.0142	.0520
180.000	-.0360	-.0330	-.1672

ALPHAT(4) = 3.740 BETAT (1) = -4.090

SECTION (1)EXTE NAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0710	.8940	.4720	-.0560	-.3597	-.3352	-.1701	-.0347	-.0055	-.0883	-.0929	-.0598	-.0429	-.0265	-.0218
30.000			.5181	-.0119	-.3124	-.2915	-.1297	.0102	.0228	-.1379	-.1043	-.0562	-.0284	-.0219	-.0099
60.000			.5204	-.0047	-.2669	-.2128	-.0419	.1275	.1596	-.5261	-.2534	-.0689	-.0085	-.0060	.0037
90.000		.9060	.4757	-.0392	-.2638	-.1861	.0318	.2282	.3651		-.6763	-.1242	-.0743	-.0788	-.0345
120.000			.3962	-.1116	-.3198	-.2529	-.0824	.0549	.0534	-.1763	-.3994	-.0510	-.0200	-.0436	.0097
135.000								.0125		.0253		-.1492		-.0588	
150.000			.3325	-.1825	-.3778	-.3167	-.1335	.0017	.0412	.1876	.0489	-.2728	-.1901	-.1388	-.0295
165.000				-.2214	-.3973	-.3251	-.1397	.0017	.0769	.2244	.1171	-.3448	-.1794	-.1189	.0048
180.000	1.0710	.7240	.2596	-.2532	-.4067	-.3022	-.1118	.0236	.0990	.2198	.1336	-.7233	-.1545	-.1269	-.0158
270.000		.7001							.4002						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 OL+T12+S12N25+AT11 EXTERNAL TANK (RB1T36)

ALPHAT(4) = 3.740 BETAT (1) = -4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0135	-.0386	-.2771
30.000	-.0014	-.0102	-.2585
60.000	.0235	.0389	-.1386
90.000	.0408	.0450	
120.000	.1117	.0830	.1678
135.000	.1202	.1400	.1686
150.000	.0871	.1079	.0706
165.000	.1110	.1342	.2293
180.000	.0938	.1058	-.0143

ALPHAT(4) = 3.740 BETAT (2) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0890	.9155	.4776	-.0497	-.3429	-.3242	-.1596	-.0220	.0070	-.0858	-.0801	-.0471	-.0223	-.0146	-.0073
30.000			.4595	-.0729	-.3516	-.3105	-.1358	.0119	.0414	-.1401	-.1010	-.0497	-.0275	-.0200	-.0169
60.000			.4199	-.1117	-.3422	-.2542	-.0564	.1250	.1758	-.4824	-.2265	-.0541	-.0319	-.0293	-.0143
90.000		.8055	.3612	-.1535	-.3303	-.2121	.0253	.2312	.3799		-.7316	-.1247	-.0915	-.0909	-.0375
120.000			.3104	-.2036	-.3571	-.2550	-.0585	.0840	.0947	-.2413	-.3657	-.1046	-.0713	-.0705	-.0014
135.000								.0499		.0129		-.1609		-.0801	
150.000			.2847	-.2273	-.3855	-.2945	-.1171	.0329	.0061	.1693	-.1505	-.3185	-.2130	-.1657	-.0630
165.000				-.2339	-.3901	-.3036	-.1243	.0188	.1020	.2249	.0685	-.4189	-.1531	-.1229	-.0117
180.000	1.0890	.7246	.2691	-.2425	-.3985	-.2948	-.1107	.0235	.1043	.2177	.1478	-.7419	-.1407	-.1097	-.0014
270.000		.8101							.3811						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0019	-.0220	-.2639
30.000	-.0037	-.0107	-.2657
60.000	.0060	.0180	-.1504
90.000	.0278	.0328	
120.000	.0806	.0265	.0942
135.000	.0798	.0781	.0523
150.000	.0390	.0561	-.0266
165.000	.0822	.0814	.0495
180.000	.0868	.0822	-.1427

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T36)

ALPHAT(4) = 3.730 BETAT (3) = 4.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0710	.8838	.4553	-.0686	-.3634	-.3473	-.2160	-.0345	-.0099	-.0920	-.1029	-.0650	-.0448	-.0320	-.0245
30.000			.3775	-.1448	-.4090	-.3529	-.1350	.0035	.0443	-.1313	-.1220	-.0645	-.0449	-.0379	-.0266
60.000			.3005	-.2183	-.3936	-.2808	-.0576	.1327	.1938	-.4385	-.2097	-.0622	-.0509	-.0408	-.0232
90.000		.6985	.2470	-.2606	-.3505	-.2117	.0340	.2383	.4060		-.7533	-.1093	-.0995	-.0674	-.0413
120.000			.2218	-.2857	-.3581	-.2390	-.0376	.1160	.1390	-.2509	-.3403	-.1494	-.1166	-.0851	-.0154
135.000								.0728		.0026		-.1965		-.1093	
150.000			.2317	-.2793	-.3829	-.2788	-.1005	.0492	.1135	.1418	-.2112	-.4072	-.3114	-.2106	-.0722
165.000				-.2631	-.4007	-.3038	-.1218	.0170	.1050	.2084	.0039	-.4823	-.1628	-.1186	-.0390
180.000	1.0710	.7349	.2641	-.2486	-.4123	-.3139	-.1257	.0070	.0876	.2084	.1420	-.6907	-.1612	-.1536	-.0383
270.000		.9162							.3689						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0151	-.0363	-.2725
30.000	-.0154	-.0221	-.2779
60.000	-.0086	-.0011	-.1681
90.000	.0180	.0181	
120.000	.0525	.0099	.0233
135.000	.0538	.0462	-.0600
150.000	.0025	-.0221	-.1883
165.000	.0569	.0557	.0766
180.000	.0587	.0595	-.1429

ALPHAT(4) = 3.730 BETAT (4) = 8.220

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0090	.8303	.4234	-.0937	-.3886	-.3824	-.2259	-.0885	-.0593	-.1248	-.1311	-.1050	-.0781	-.0805	-.0710
30.000			.2853	-.2296	-.4790	-.4252	-.1717	-.0387	.0231	-.1219	-.1342	-.0864	-.0743	-.0725	-.0574
60.000			.1843	-.3193	-.4296	-.2748	-.0626	.1329	.2121	-.3930	-.1613	-.0517	-.0683	-.0606	-.0466
90.000		.5743	.1324	-.3637	-.3284	-.1839	.0512	.2539	.4296		-.7025	-.0936	-.0932	-.0872	-.0404
120.000			.1174	-.3770	-.3304	-.2183	-.0135	.1350	.1732	-.3023	-.3080	-.2073	-.1637	-.1187	-.0616
135.000								.0810		-.0136		-.2249		-.1666	
150.000			.1490	-.3470	-.3818	-.2753	-.0921	.0551	.1200	.1080	-.3251	-.4661	-.3429	-.2307	-.1273
165.000				-.3107	-.4159	-.3163	-.1375	.0016	.0862	.1625	-.0307	-.4022	-.2118	-.2060	-.0964
180.000	1.0090	.6009	.2345	-.2707	-.4332	-.3442	-.1467	-.0362	.0578	.1485	.0896	-.4464	-.2608	-.2428	-.1105
270.000		1.0020							.3575						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T38)

ALPHAT(4) = 3.730 BETAT (4) = 8.220

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0880	-.0907	-.3203
30.000	-.0453	-.0537	-.3005
60.000	-.0427	-.0357	-.2128
90.000	-.0013	.0113	
120.000	.0154	-.0074	.0345
135.000	.0075	.0269	-.0715
150.000	-.0539	-.0570	-.1870
165.000	.0026	.0049	.0742
180.000	-.0190	-.0162	-.1644

ALPHAT(5) = 8.030 BETAT (1) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0340	1.0040	.5959	.0792	-.2531	-.2524	-.1258	.0166	.0566	.0017	-.0087	-.0056	.0024	.0078	.0168
30.000			.5497	.0300	-.2786	-.2597	-.1187	.0380	.0875	-.0334	-.0199	-.0074	-.0012	-.0077	.0075
60.000			.4448	-.0778	-.3282	-.2607	-.0524	.1400	.2447	-.2818	-.0564	.0145	.0034	-.0113	-.0058
90.000		.7440	.3204	-.1882	-.3595	-.2328	-.0100	.1864	.2825		-.4298	-.0506	-.0673	-.0647	-.0169
120.000			.2211	-.2831	-.3863	-.2757	-.1126	.0031	-.0309	-.2016	-.5400	-.1637	-.0368	-.0398	.0198
135.000								-.0043		.0085		-.2020		-.0543	
150.000			.1719	-.3326	-.4293	-.2956	-.1433	-.0015	.0347	.1360	-.1217	-.3024	-.1767	-.1416	-.0317
165.000				-.3417	-.4240	-.3080	-.1278	.0132	.0789	.2011	.0582	-.4420	-.1167	-.0836	.0137
180.000	1.0340	.5959	.1504	-.3516	-.4212	-.3017	-.1167	.0183	.0805	.2100	.1500	-.8102	-.1167	-.0667	.0301
270.000		.7537							.2840						

X/LT	.7460	.8530	.9280
PHI			
.000	.0278	-.0010	-.2279
30.000	.0219	.0147	-.2361
60.000	.0147	.0304	-.1555
90.000	.0347	.0163	
120.000	.0982	.0729	.0928
135.000	.0993	.1094	.0653
150.000	.0600	.0806	-.0183
165.000	.1035	.1148	.0874
180.000	.1105	.1179	-.1216

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T36)

ALPHAT(5) = 8.020 BETAT (2) = 4.150

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0180	.9814	.5765	.0526	-.2666	-.2784	-.1861	.0054	.0405	-.0142	-.0242	-.0184	-.0171	-.0093	.0036
30.000			.4624	-.0537	-.3554	-.3317	-.1810	.0052	.0776	-.0483	-.0582	-.0360	-.0313	-.0323	-.0229
60.000			.3218	-.1854	-.4037	-.3206	-.0712	.1257	.2536	-.2571	-.0869	.0029	-.0077	-.0165	-.0162
90.000		.6382	.2091	-.2931	-.3850	-.2310	.0039	.2011	.3068		-.3816	-.0012	-.0507	-.0430	-.0149
120.000			.1406	-.3551	-.3610	-.2482	-.0699	.0495	.0339	-.1997	-.4683	-.1889	-.0856	-.0585	.0022
135.000								.0423		.0144		-.2203		-.0817	
150.000			.1304	-.3748	-.3774	-.2726	-.1069	.0357	.0786	.1255	-.2386	-.3871	-.2632	-.1765	-.0598
165.000				-.3602	-.3893	-.2906	-.1156	.0167	.0876	.1937	.0029	-.4393	-.1356	-.0827	-.0058
180.000	1.0180	.6050	.1465	-.3579	-.4055	-.3120	-.1254	-.0071	.0671	.1903	.1418	-.7543	-.1234	-.1026	-.0153
270.000		.8630							.2791						

X/LT	.7460	.8530	.9280
PHI			
.000	.0070	-.0151	-.2429
30.000	-.0040	-.0084	-.2472
60.000	.0014	.0103	-.1727
90.000	.0295	.0085	
120.000	.0770	.0441	.0170
135.000	.0735	.0686	-.0541
150.000	.0379	.0047	-.1776
165.000	.0812	.0780	.0772
180.000	.0812	.0851	-.1373

ALPHAT(5) = 8.010 BETAT (3) = 8.270

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9526	.9199	.5392	.0283	-.2952	-.3102	-.1923	-.0528	-.0165	-.0598	-.0710	-.0611	-.0490	-.0514	-.0472
30.000			.3542	-.1558	-.4440	-.4233	-.1809	-.0571	.0305	-.0701	-.1241	-.0771	-.0705	-.0741	-.0686
60.000			.1681	-.3046	-.4952	-.3644	-.1032	.1043	.2533	-.1923	-.1081	-.0203	-.0256	-.0230	-.0281
90.000		.5137	.0887	-.3900	-.3319	-.2148	.0262	.2150	.3338		-.4536	.0064	-.0367	-.0570	-.0201
120.000			.0476	-.4343	-.2982	-.2148	-.0234	.1009	.0848	-.1972	-.4272	-.2140	-.1275	-.0965	-.0411
135.000								.0681		-.0015		-.2179		-.1363	
150.000			.0577	-.4343	-.3477	-.2539	-.0824	.0472	.0989	.1222	-.2907	-.4441	-.3066	-.2142	-.0951
165.000				-.4087	-.3857	-.2967	-.1238	.0007	.0792	.1611	-.0495	-.3244	-.1835	-.1742	-.0827
180.000	.9526	.4654	.1114	-.3733	-.4379	-.3371	-.1491	-.0413	.0372	.1330	.0761	-.3840	-.2062	-.2173	-.0961
270.000		.9470							.2731						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T36)

ALPHAT(3) = 8.010 BETAT (3) = 8.270

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0484	-.0726	-.2962
30.000	-.0512	-.0564	-.2908
60.000	-.0039	.0029	-.1635
90.000	.0156	.0193	
120.000	.0361	.0318	.0097
135.000	.0341	.0515	-.0684
150.000	-.0208	-.0244	-.1766
165.000	.0249	.0335	.0942
180.000	.0003	.0084	-.1570

ARC11-716 Ia14 Q1+T12+S12N25+AT11 EXTERNAL TANK (RB1T37) (14 FEB 74)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES
LREF = 38.7090 INCHES YMRP = .0000 INCHES
BREF = 38.7090 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = .950 ELEVON = .000
RUDDER = .000 SPDBRK = .000

ALPHAT(1) = -8.540 BETAT (1) = -4.050

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0520	.6424	.2228	-.2842	-.5819	-.6202	-.1603	-.0428	.0453	-.1110	-.3452	-.3472	-.0410	-.0131	.0098
30.000			.2683	-.2420	-.5512	-.6195	-.2528	.0221	-.0462	-.2765	-.4691	-.2768	-.1306	-.0625	-.0071
60.000			.3715	-.1399	-.4825	-.5361	-.1201	-.0017	-.0911	-.4662	-.7377	-.4076	-.2079	.0145	.0608
90.000		.9116	.5049	-.0028	-.3716	-.3754	.0918	.2624	.3284		-.6362	-.7063	-.2033	-.0810	.0582
120.000			.6275	.1181	-.2633	-.3241	.0681	.2649	.3945	-.0025	.0834	-.0622	-.1342	-.2199	.0452
135.000								.2229		.2307		-.1048		-.2492	
150.000			.6900	.1757	-.2175	-.2756	.0244	.1988	.3036	.3794	.0911	-.2737	-.2701	-.3459	-.0285
165.000				.1781	-.2172	-.2748	.0080	.1647	.2840	.4084	.2341	-.3366	-.2693	-.3493	-.0067
180.000	1.0520	1.0790	.6660	.1487	-.2364	-.2955	-.0022	.1383	.2781	.3994	.2477	-.3769	-.2636	-.2815	-.0593
270.000		.7090							.3351						

X/LT	.7460	.8530	.9280
PHI			
.000	.0076	-.0063	-.2367
30.000	.0112	.0023	-.1780
60.000	.0362	.0275	-.0703
90.000	.0764	.0176	
120.000	.1181	-.0858	.2275
135.000	.1204	.0461	.2047
150.000	.0688	.0571	.0994
165.000	.0907	.0790	.2712
180.000	.0741	.0607	.0522

ALPHAT(1) = -8.510 BETAT (2) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0670	.6565	.2210	-.2741	-.5875	-.6350	-.1668	-.0601	.0584	-.0966	-.3475	-.4046	-.0413	-.0099	.0264
30.000			.2373	-.2648	-.5773	-.6355	-.1559	-.0079	.0277	-.2044	-.4491	-.2997	-.1133	-.0631	-.0036
60.000			.2929	-.2153	-.5393	-.5395	.0249	.0455	-.0383	-.4152	-.7391	-.3981	-.2301	-.0623	.0443
90.000		.8135	.3956	-.1156	-.4656	-.5332	.0467	.2647	.3333		-.6965	-.7182	-.2148	-.0862	.0312
120.000			.5185	.0099	-.3686	-.4395	.0408	.2481	.3977	.0472	.0261	-.1612	-.2223	-.2701	.0140
135.000								.2027		.2215		-.2021		-.3238	
150.000			.6180	.0971	-.2962	-.3615	.0077	.1827	.2974	.3568	-.0138	-.4334	-.3303	-.4272	-.0547

ARC11-716 IA14 OI+T12+S12N25+AT11 EXTERNAL TANK (RB1T37)

ALPHAT(1) = -8.510 BETAT (2) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
165.000				.1372	-.2622	-.3200	.0437	.1667	.2821	.4027	.1707	-.3862	-.2889	-.3493	-.0439
180.000	1.0470	1.0770	.6708	.1451	-.2506	-.3119	.0283	.1626	.2811	.3925	.2541	-.3867	-.2278	-.3341	-.0404
270.000		.8076							.3212						

X/LT	.7460	.8530	.9280
PHI			
.000	.0209	-.0152	-.2558
30.000	.0140	-.0035	-.2151
60.000	.0476	.0247	-.0648
90.000	.0658	.0242	
120.000	.0916	-.0627	.0689
135.000	.0888	.0139	.0167
150.000	.0295	-.0191	-.1309
165.000	.0751	.0272	.1093
180.000	.0810	.0359	-.0386

ALPHAT(1) = -8.520 BETAT (3) = 4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0490	.6378	.2079	-.2868	-.5946	-.6385	-.1851	-.0737	.0522	-.1179	-.3500	-.3093	-.0505	-.0172	-.0080
30.000			.1994	-.3018	-.6009	-.6410	-.1612	-.0095	.0835	-.1639	-.4174	-.2786	-.0615	-.0349	-.0111
60.000			.2165	-.2812	-.5903	-.5308	.0340	.0805	.0321	-.3626	-.6984	-.3753	-.1673	-.0701	.0131
90.000		.7057	.2871	-.2228	-.5449	-.5367	-.0191	.2782	.3474		-.7000	-.7210	-.2223	-.0649	.0043
120.000			.4000	-.1013	-.4639	-.5265	-.0023	.2276	.4005	.0918	-.0239	-.2238	-.2483	-.2249	-.0526
135.000								.1709		.2071		-.2909		-.2627	
150.000			.5237	.0141	-.3685	-.4272	-.0451	.1436	.2759	.3100	-.1602	-.5131	-.4081	-.3460	-.0940
165.000				.0932	-.2944	-.3510	-.0443	.1323	.2584	.3664	.1316	-.4907	-.2462	-.2795	-.0904
180.000	1.0490	1.0680	.6615	.1414	-.2472	-.3107	-.0157	.1431	.2597	.3731	.2503	-.4247	-.2340	-.3416	-.0736
270.000		.9077							3124						

X/LT	.7460	.8530	.9280
PHI			
.000	.0041	-.0199	-.2423
30.000	.0038	-.0181	-.2505
60.000	.0298	.0084	-.1027
90.000	.0180	-.0266	
120.000	.0331	-.0577	-.0447
135.000	.0275	-.0143	-.1066
150.000	-.0220	-.0879	-.2129

ARC11-716 IA14 C1+T12+S12N25+AT11 EXTERNAL TANK (RB1T37)

ALPHAT(1) = -8.520 BETAT (3) = 4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
165.000	.0248	.0048	.0651
180.000	.0258	.0179	-.0994

ALPHAT(1) = -8.550 BETAT (4) = 8.180

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9971	.9837	.1800	-.3133	-.6059	-.6710	-.2082	-.1156	.0155	-.1393	-.3485	-.2775	-.0940	-.0578	-.0250
30.000			.1431	-.3364	-.6251	-.5644	-.1277	-.0053	.0871	-.1274	-.3983	-.2572	-.0818	-.0299	-.0212
60.000			.1434	-.3302	-.6191	-.2059	-.0939	-.0227	.0933	-.3122	-.6544	-.3489	-.1487	-.0475	-.0010
90.000		.9979	.1806	-.3043	-.6036	-.2067	-.1190	.2277	.3584		-.6949	-.6917	-.2292	-.0719	-.0426
120.000			.2853	-.2032	-.5405	-.6031	-.0805	.1839	.3940	.1259	-.0568	-.2531	-.2825	-.2458	-.1512
135.000								.1160		.1912		-.3420		-.3107	
150.000			.4242	-.0752	-.4336	-.4884	-.1377	.0820	.2435	.2476	-.2200	-.6396	-.4869	-.3564	-.1882
165.000				.0438	-.3272	-.3829	-.1515	.0615	.2109	.2940	.0853	-.6188	-.2632	-.2951	-.1849
180.000	.9971	.9869	.6321	.1213	-.2561	-.3062	-.0816	.0902	.2106	.3259	.2314	-.4222	-.3160	-.3752	-.1959
270.000		.9912							.3103						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0178	-.0390	-.2359
30.000	-.0155	-.0296	-.2560
60.000	.0113	-.0031	-.1189
90.000	-.0564	-.1139	
120.000	-.0334	-.0946	-.0691
135.000	-.0342	-.0294	.1261
150.000	-.0903	-.1262	-.2295
165.000	-.0526	-.0375	.0405
180.000	-.0780	-.0498	-.0994

ARC11-716 IA14 OL+T12+S12N25+AT11 EXTERNAL TANK (RB1T37)

ALPHAT(2) = -4.410 BETAT (1) = -8.180

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0990	.7039	.2942	-.2162	-.5475	-.5510	-.3275	.0100	-.0021	-.1420	-.3174	-.2395	-.0887	-.0353	-.0479
30.000			.3999	-.1122	-.4724	-.5409	-.3931	-.0182	-.0595	-.3401	-.4036	-.2071	-.1306	-.0871	-.0372
60.000			.5316	.0188	-.3696	-.3949	-.0431	.0536	.0174	-.6401	-.6352	-.3183	-.0990	.0374	.0300
90.000		1.0480	.6435	.1255	-.2689	-.3158	.1011	.2999	.4218		-.6305	-.6729	-.1430	-.0279	.0441
120.000			.6797	.1638	-.2364	-.2892	.0629	.2398	.3070	-.2303	.0563	.0418	-.0503	-.1421	.0338
135.000								.1804		.0928		-.0161		-.1892	
150.000			.6532	.1347	-.2653	-.3120	-.0783	.1450	.2032	.3083	.2560	-.1680	-.2495	-.2657	-.0346
165.000				.0745	-.3206	-.3622	-.1071	.0902	.1848	.3448	.2483	-.2434	-.2192	-.2972	-.0328
180.000	1.0980	.9763	.5300	.0100	-.3645	-.4276	-.0688	.0625	.1925	.3396	.1984	-.4246	-.2784	-.3044	-.0781
270.000		.6598							.4857						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0890	-.0321	-.2297
30.000	-.0199	-.0118	-.1926
60.000	.0422	.0714	-.0614
90.000	.0858	.0366	
120.000	.1524	.0545	.3288
135.000	.1990	.1588	.3278
150.000	.1095	.1558	.2395
165.000	.1157	.1810	.3710
180.000	.0765	.1191	.1088

ALPHAT(2) = -4.390 BETAT (2) = -4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1120	.7342	.3240	-.1992	-.5319	-.5987	-.1551	-.0368	.0632	-.1021	-.3220	-.3431	-.0229	-.0100	-.0022
30.000			.3755	-.1425	-.4989	-.5622	-.2411	.0440	.0236	-.2532	-.3825	-.2388	-.0883	-.0678	-.0176
60.000			.4548	-.0656	-.4333	-.4608	-.2385	.1142	.0635	-.5941	-.6225	-.3426	-.1688	-.0080	.0431
90.000		.9630	.5395	.0161	-.3687	-.4365	.1011	.3139	.4342		-.6281	-.7187	-.1764	-.0480	.0311
120.000			.5889	.0670	-.3269	-.3899	.1201	.2514	.3280	-.1784	-.0029	-.0626	-.1239	-.2048	.0194
135.000								.1979		.1083		-.1216		-.2352	
150.000			.6039	.0772	-.3155	-.3833	-.0037	.1690	.2365	.2951	.0526	-.2839	-.2659	-.3233	-.0433
165.000				.0569	-.3325	-.4079	-.0327	.1324	.2242	.3478	.1960	-.3711	-.2555	-.3269	-.0256
180.000	1.1120	.9929	.5563	.0263	-.3601	-.4250	-.0316	.1155	.2258	.3437	.2103	-.4319	-.2527	-.2862	-.0576
270.000		.7649							.4622						

X/LT	.7480	.8530	.9280
PHI			

ARC11-716 IA14 OL+T12+S12N25+AT11 EXTERNAL TANK (RB1T37)

ALPHAT(2) = -4.390 BETAT (2) = -4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	.0088	-.0064	-.2252
30.000	.0189	.0174	-.1771
60.000	.0562	.0890	-.0684
90.000	.0910	.0877	
120.000	.1245	.0085	.2542
135.000	.1284	.1156	.2572
150.000	.0877	.1120	.1467
165.000	.1081	.1334	.2667
180.000	.0877	.1048	.0630

ALPHAT(2) = -4.390 BETAT (3) = -.020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1250	.7667	.3262	-.1991	-.5273	-.5856	-.1907	-.0231	.0765	-.0925	-.3169	-.3877	-.0071	-.0020	.0147
30.000			.3359	-.1912	-.5214	-.5886	-.1441	.0334	.0796	-.1855	-.3706	-.2945	-.0395	-.0271	-.0158
60.000			.3714	-.1549	-.4978	-.4661	-.1944	.1709	.1042	-.5460	-.6051	-.3570	-.1230	-.0328	.0198
90.000		.8655	.4263	-.0945	-.4540	-.5202	.0824	.3300	.4401		-.6331	-.7341	-.1788	-.0546	.0250
120.000			.4901	-.0336	-.4030	-.4727	.0421	.2461	.3449	-.1203	-.0632	-.1640	-.1891	-.2278	.0057
135.000								.1974		.1315		-.2073		-.2821	
150.000			.5376	.0108	-.3695	-.4420	-.0046	.1720	.2538	.2836	-.0770	-.4217	-.2098	-.3717	-.0518
165.000				.0303	-.3548	-.4324	-.0077	.1468	.2359	.3384	.1218	-.4414	-.2358	-.3007	-.0346
180.000	1.1250	.9937	.5622	.0349	-.3551	-.4263	.0026	.1571	.2159	.3359	.2151	-.4678	-.2055	-.2885	-.0366
270.000		.8661							.4364						

X/LT	.7480	.8530	.9280
PHI			
.000	.0247	.0069	-.2304
30.000	.0101	.0113	-.2105
60.000	.0468	.0905	-.0905
90.000	.0702	.0661	
120.000	.0956	-.0149	.1215
135.000	.0961	.0572	.0590
150.000	.0505	.0323	-.0712
165.000	.0885	.0672	.0928
180.000	.0910	.0744	-.0603

ARC11-716 IA14 OI+T12+S12N25+AT11 EXTERNAL TANK (RB1T37)

ALPHAT(2) = -4.380 BETAT (4) = 4.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5980	.6380
PHI															
.000	1.1090	.7466	.3137	-.8061	-.5332	-.6024	-.1781	-.0259	.0652	-.1132	-.3203	-.3247	-.0239	-.0151	-.0080
30.000			.2882	-.2280	-.5553	-.6153	-.1357	.0006	.1085	-.1420	-.3740	-.2725	-.0218	-.0141	-.0031
60.000			.2848	-.2280	-.5528	-.5484	-.1062	.1677	.1545	-.4770	-.6224	-.3164	-.0760	-.0215	-.0039
90.000		.7583	.3154	-.1977	-.5322	-.4926	.0001	.2382	.4674		-.6258	-.6388	-.1612	-.0568	-.0029
120.000			.3772	-.1336	-.4838	-.5560	-.0012	.1895	.3522	-.0675	-.1071	-.2346	-.2207	-.1924	-.0495
135.000								.1669		.1401		-.2938		-.2439	
150.000			.4574	-.0642	-.4338	-.5020	-.0471	.1460	.2528	.2618	-.2080	-.5250	-.3984	-.3290	-.0909
165.000				-.0075	-.3861	-.4599	-.0685	.1216	.2233	.3200	.0826	-.5307	-.2357	-.2568	-.0793
180.000	1.1050	.9096	.5517	.0228	-.3566	-.4289	-.0476	.1167	.2120	.3215	.2117	-.4634	-.2264	-.3117	-.0744
270.000		.9991							.4220						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0005	-.0104	-.2287
30.000	.0111	-.0016	-.2362
60.000	.0198	.0225	-.1275
90.000	.0347	.0274	
120.000	.0442	-.0109	-.0023
135.000	.0417	.0227	-.0717
150.000	.0007	-.0455	-.1807
165.000	.0435	.0368	.0667
180.000	.0446	.0495	-.1038

ALPHAT(2) = -4.410 BETAT (5) = 8.150

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1790	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5980	.6380
PHI															
.000	1.0510	.8939	.2853	-.2240	-.5446	-.6179	-.2283	-.0517	.0110	-.1564	-.3324	-.2187	-.0351	-.0326	-.0494
30.000			.2207	-.2788	-.5918	-.5884	-.1851	.0079	.1156	-.1193	-.3835	-.1513	-.0302	-.0261	-.0183
60.000			.2021	-.2970	-.5936	-.4131	-.0828	.1386	.1832	-.4410	-.6180	-.2076	-.0454	-.0294	-.0180
90.000		.8528	.2179	-.2777	-.5680	-.0843	-.0499	.0726	.5018		-.6167	-.4606	-.0973	-.0471	-.0419
120.000			.2746	-.2273	-.5932	-.3173	-.0481	.1233	.3524	-.0153	-.1291	-.2783	-.2359	-.1936	-.1126
135.000								.1069		.1444		-.3569		-.2602	
150.000			.3664	-.1444	-.4921	-.5536	-.0728	.0865	.2341	.2356	-.2637	-.6384	-.4291	-.3047	-.1623
165.000				-.0579	-.4238	-.4891	-.1063	.0637	.1841	.2759	.0496	-.6947	-.2712	-.2887	-.1595
180.000	1.0510	.8961	.5274	.0081	-.3665	-.4334	-.0931	.0665	.1572	.2893	.2015	-.4606	-.3268	-.3372	-.1587
270.000		1.0480							.4121						

X/LT	.7480	.8530	.9280
PHI			

ARC11-716 IA14 OL+712+S12N2S+AT11 EXTERNAL TANK (RB1T37)

ALPHAT(2) = -4.410 BETAT (5) = 8.190

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	-.0236	-.0342	-.2378
30.000	-.0022	-.0089	-.2376
60.000	-.0009	.0309	-.1321
90.000	-.0253	-.0317	
120.000	-.0073	-.0514	-.0307
135.000	-.0130	.0106	-.0846
150.000	-.0525	-.0754	-.1945
165.000	-.0242	-.0012	.0837
180.000	-.0417	-.0141	-.1045

ALPHAT(3) = -.520 BETAT (1) = -8.170

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0790	.8005	.3905	-.1235	-.4859	-.5485	-.4463	.0433	.0007	-.1305	-.3053	-.1833	-.0639	-.0658	-.0584
30.000			.5040	-.0151	-.3970	-.4715	-.2920	.0146	.0025	-.2731	-.2957	-.1560	-.0852	-.0795	-.0373
60.000			.6065	.0810	-.3111	-.3629	.0189	.1371	.1335	-.5300	-.4712	-.1729	-.0958	.0199	.0361
90.000		1.0680	.6545	.1339	-.2694	-.2816	.1494	.3173	.4555		-.5850	-.6238	-.1348	-.0353	.0371
120.000			.6241	.1040	-.2928	-.3558	.0176	.1817	.2113	-.3784	-.1660	.0854	-.0001	-.0848	.0348
135.000								.1191		-.0289		-.0075		-.1145	
150.000			.5564	.0352	-.3551	-.4191	-.2541	.0926	.1186	.2320	.2007	-.1955	-.2092	-.2087	-.0171
165.000				-.0356	-.4148	-.4684	-.3955	.0680	.1271	.2938	.2071	-.2429	-.1822	-.2123	-.0114
180.000	1.0790	.8907	.4270	-.0921	-.4478	-.5147	-.1130	.0354	.1571	.3010	.1620	-.4567	-.2232	-.2493	-.0480
270.000		.6093							.5690						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0335	-.0261	-.2263
30.000	-.0004	.0119	-.1974
60.000	.0612	.1029	-.0618
90.000	.0990	.0952	
120.000	.1769	.1280	.3520
135.000	.1859	.2128	.3566
150.000	.1441	.1977	.2728
165.000	.1564	.2038	.3807
180.000	.1221	.1590	.1172

ARC11-716 IA14 OL+T12+S12NES+AT11 EXTERNAL TANK (RB1T37)

ALPHAT(3) = -.510 BETAT (3) = -4.500

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6360
PHI															
.000	1.1380	.8348	.4257	-.1076	-.4082	-.5388	-.3172	.0517	.0673	-.0810	-.3081	-.1552	-.0077	-.0175	-.0065
30.000			.4766	-.0544	-.4248	-.5018	-.2135	.0796	.0676	-.1889	-.3023	-.1588	-.0380	-.0436	-.0219
60.000			.5266	-.0098	-.3840	-.4249	-.1429	.1832	.1684	-.4782	-.4853	-.2058	-.0547	-.0067	.0291
90.000		.9818	.5469	.0179	-.3632	-.3734	.1497	.3368	.4689		-.6264	-.6381	-.1378	-.0493	.0388
120.000			.5354	.0099	-.3677	-.4442	.0384	.2117	.2428	-.3140	-.2119	-.0376	-.0806	-.1558	.0204
135.000								.1659		.0170		-.1361		-.1850	
150.000			.5108	-.0175	-.3931	-.4481	-.1787	.1414	.1726	.2366	.0204	-.2365	-.2220	-.2561	-.0267
165.000				-.0488	-.4111	-.4898	-.0740	.1044	.1725	.2917	.1485	-.3578	-.2034	-.2599	-.0009
180.000	1.1320	.9026	.4485	-.0775	-.4340	-.5089	-.0684	.0972	.1920	.2868	.1683	-.4693	-.1838	-.2319	-.0297
270.000		.7854							.5136						

X/LT	.7480	.8530	.9280
PHI			
.000	.0112	.0104	-.1926
30.000	.0173	.0389	-.1843
60.000	.0549	.0693	-.0774
90.000	.0932	.0934	
120.000	.1415	.0921	.2637
135.000	.1510	.1738	.2703
150.000	.1167	.1624	.1824
165.000	.1392	.1734	.2781
180.000	.1198	.1449	.0844

ALPHAT(3) = -.510 BETAT (3) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2130	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6360
PHI															
.000	1.1400	.8714	.4321	-.0967	-.4580	-.5294	-.3021	.0330	.0976	-.0617	-.3058	-.1873	.0067	-.0002	.0043
30.000			.4567	-.0952	-.4573	-.5340	-.1714	.0907	.1225	-.1245	-.3294	-.1476	-.0132	-.0249	-.0049
60.000			.4367	-.0934	-.4502	-.5226	-.0688	.1976	.2137	-.4239	-.5058	-.2449	-.0019	-.0004	.0138
90.000		.8867	.4421	-.0626	-.4492	-.4494	.0505	.3600	.4882		-.7022	-.2761	-.0975	-.0454	.0107
120.000			.4489	-.0705	-.4469	-.5142	.0215	.2403	.2844	-.2454	-.2361	-.1334	-.1058	-.1701	.0035
135.000								.1786		.0528		-.1747		-.2139	
150.000			.4802	-.0885	-.4393	-.5026	-.0482	.1430	.2103	.2384	-.1413	-.3695	-.2260	-.2922	-.0640
165.000				-.0574	-.4335	-.5059	-.0474	.1089	.2018	.2859	.0809	-.4562	-.1669	-.2405	-.0290
180.000	1.1480	.9065	.4997	-.0659	-.4575	-.5249	-.0295	.0625	.1844	.2829	.1786	-.5145	-.1476	-.2211	-.0267
270.000		.8900							.4874						

X/LT	.7480	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T37)

ALPHAT(3) = -.510 BETAT (3) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0289	.0277	-.1909
30.000	.0291	.0359	-.1719
60.000	.0476	.0586	-.0835
90.000	.0791	.0918	
120.000	.1111	.0402	.1575
135.000	.1116	.0970	.1013
150.000	.0768	.0839	.0234
165.000	.1095	.1079	.0625
180.000	.1097	.1105	-.0783

ALPHAT(3) = -.510 BETAT (4) = 4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1270	.8459	.4160	-.1093	-.4764	-.5402	-.3942	.0263	.0744	-.0876	-.3132	-.1895	-.0189	-.0234	-.0146
30.000			.3607	-.1628	-.5122	-.5587	-.3107	.0993	.1342	-.1034	-.3787	-.1370	-.0121	-.0836	-.0166
60.000			.3315	-.1986	-.5272	-.5904	-.1000	.1029	.2559	-.3792	-.5089	-.2201	-.0270	-.0836	-.0097
90.000		.7760	.3282	-.1942	-.5287	-.4866	-.0228	.3563	.5034		-.6995	-.0607	.0100	-.0875	-.0761
120.000			.3451	-.1775	-.5183	-.5825	-.0665	.1211	.3226	-.1804	-.2503	-.1516	-.1318	-.1852	-.0293
135.000								.0801		.0806		-.2297		-.2208	
150.000			.3872	-.1422	-.4921	-.5556	-.0724	.0749	.2296	.2055	-.2487	-.4539	-.3256	-.3247	-.0710
165.000				-.1051	-.4723	-.5363	-.1072	.0921	.2009	.2809	.0388	-.5837	-.1801	-.2193	-.0866
180.000	1.1270	.9097	.4516	-.0810	-.4510	-.5148	-.1356	.1014	.1816	.2730	.1772	-.5056	-.1788	-.2611	-.0596
270.000		.9863							.4656						

X/LT	.7460	.8530	.9280
PHI			
.000	.0092	.0054	-.1906
30.000	.0181	.0218	-.1911
60.000	.0264	.0413	-.0733
90.000	.0253	.0521	
120.000	.0728	.0239	.0211
135.000	.0766	.0626	-.0327
150.000	.0431	.0064	-.1501
165.000	.0775	.0798	.0936
180.000	.0808	.0919	-.0829

ARC11-716 IA14 O1+T12+S12A25+AT11 EXTERNAL TANK (RB1T37)

ALPHAT(3) = -.520 BETAT (5) = 8.190

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0700	.7927	.3821	-.1316	-.4850	-.5576	-.6128	-.0131	.0100	-.1436	-.2930	-.2452	-.0719	-.0742	-.0866
30.000			.2667	-.2248	-.5516	-.6118	-.1718	-.0224	.1201	-.0942	-.3800	-.1214	-.0304	-.0427	-.0296
60.000			.2408	-.2680	-.5781	-.3971	-.1065	.0741	.2420	-.3417	-.5123	-.1752	-.0509	-.0429	-.0293
90.000		.6646	.2227	-.2685	-.5822	-.4579	-.0142	.2753	.5256		-.6821	-.0137	-.0211	-.1381	-.1476
120.000			.2449	-.2569	-.5718	-.1186	-.0725	-.0054	.2448	-.1351	-.2976	-.1887	-.1786	-.1945	-.0839
135.000								.0207		.0772		-.2923		-.2193	
150.000			.3036	-.2140	-.5392	-.3528	-.0766	.0300	.2061	.1863	-.2951	-.5665	-.3249	-.3036	-.1239
165.000				-.1513	-.4976	-.5662	-.0872	.0379	.1541	.2324	.0186	-.7084	-.2348	-.2464	-.1200
180.000	1.0700	.7784	.4222	-.0986	-.4594	-.5300	-.0880	.0408	.1077	.2409	.1653	-.4798	-.2866	-.3018	-.1283
270.000		1.0720							.4507						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0375	-.0322	-.2312
30.000	-.0058	-.0063	-.2065
60.000	-.0006	.0131	-.0916
90.000	-.0588	-.0081	
120.000	.0250	.0116	-.0007
135.000	.0209	.0487	-.0535
150.000	-.0122	-.0286	-.1634
165.000	.0136	.0400	.1278
180.000	.0031	.0313	-.0942

ALPHAT(4) = 3.960 BETAT (1) = -8.210

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0660	.9000	.5027	-.0168	-.3967	-.4707	-.4629	.0381	.0256	-.0907	-.1626	-.1587	-.0426	-.0497	-.0485
30.000			.6220	.0985	-.2993	-.3743	-.2115	.0483	.0723	-.1830	-.1134	-.1438	-.0206	-.0270	-.0160
60.000			.6788	.1548	-.2505	-.3150	.0583	.1999	.2388	-.4023	-.3014	-.1136	.0549	.0413	.0393
90.000		1.0500	.6491	.1286	-.2750	-.2983	.1576	.3018	.4292		-.4661	-.2065	-.0400	-.0650	-.0009
120.000			.5446	.0278	-.3580	-.4251	-.0544	.0935	.0794	-.3633	-.4997	-.1019	.1291	.0196	.0443
135.000								.0420		.0178		-.1334		-.0175	
150.000			.4385	-.0785	-.4415	-.5105	-.3334	.0315	.0237	.2174	.0663	-.2804	-.0852	-.1368	-.0013
165.000				-.1511	-.5052	-.4895	-.3134	.0535	.0688	.2513	.1365	-.2840	-.0865	-.1608	.0100
180.000	1.0660	.7751	.3104	-.2035	-.5285	-.5543	-.1417	.0323	.1299	.2520	.1245	-.4957	-.1480	-.1881	-.0228
270.000		.6556							.5261						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1737)

ALPHAT(4) = 3.960 BETAT (1) = -8.210

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0228	-.0219	-.1923
30.000	.0241	.0415	-.1732
60.000	.0737	.1135	-.0577
90.000	.0784	.0256	
120.000	.2108	.1876	.3639
135.000	.2175	.2609	.3816
150.000	.1755	.2325	.3115
165.000	.1886	.2312	.3841
180.000	.1500	.1880	.1198

ALPHAT(4) = 3.960 BETAT (2) = -4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1190	.9558	.5423	.0081	-.3802	-.4581	-.5387	.0853	.0889	-.0421	-.2243	-.1050	-.0146	-.0105	.0014
30.000			.5808	.0484	-.3449	-.4291	-.4000	.1376	.1275	-.1125	-.2010	-.1337	-.0148	-.0072	.0039
60.000			.5841	.0525	-.3406	-.4152	-.0135	.2150	.2625	-.3527	-.3183	-.2066	.0123	.0264	.0221
90.000		.9635	.5390	.0132	-.3741	-.4411	.1022	.3145	.4435		-.5313	-.2557	.0159	-.0396	-.0294
120.000			.4637	-.0592	-.4248	-.5022	-.0368	.1486	.1309	-.3040	-.4725	-.1934	.0448	-.0471	.0073
135.000								.1158		.0151		-.2986		-.0829	
150.000			.4004	-.1216	-.4819	-.5009	-.2896	.1148	.0958	.2154	.0443	-.3568	-.1060	-.1717	-.0204
165.000				-.1668	-.5189	-.5742	-.1062	.0511	.1291	.2500	.1247	-.3736	-.1280	-.1696	.0055
180.000	1.1190	.7899	.3303	-.1990	-.5271	-.5704	-.0859	.0086	.1498	.2302	.1496	-.5306	-.1226	-.1443	-.0181
270.000		.7692							.4917						

X/LT	.7460	.8530	.9280
PHI			
.000	.0239	.0327	-.1426
30.000	.0411	.0603	-.1235
60.000	.0693	.1105	-.0182
90.000	.0914	.1496	
120.000	.1626	.1680	.2463
135.000	.1762	.2148	.2452
150.000	.1481	.1857	.1762
165.000	.1649	.1987	.2854
180.000	.1437	.1711	.0698

ARC11-716 IA14 OL+T12+S12N25+AT11 EXTERNAL TANK (RB1737)

ALPHAT(4) = 3.950 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.1350	.9717	.5446	.0137	-.3725	-.4502	-.5395	.0974	.1120	-.0232	-.2322	-.1547	.0015	.0038	.0124
30.000			.5278	-.0039	-.3882	-.4631	-.4884	.1263	.1519	-.0679	-.2482	-.1460	-.0041	-.0056	-.0004
60.000			.4878	-.0411	-.4178	-.4851	-.0580	.1757	.2851	-.3050	-.3340	-.1707	-.0120	-.0059	-.0035
90.000		.8728	.4361	-.0906	-.4575	-.5279	.0070	.3145	.4645		-.5959	-.2511	-.0115	-.0632	-.0447
120.000			.3859	-.1386	-.4942	-.5226	-.1191	.1970	.1829	-.2598	-.4270	-.1986	-.0189	-.0874	.0045
135.000								.1537		.0261		-.2955		-.1134	
150.000			.3613	-.1701	-.5132	-.5699	-.1224	.1110	.1590	.2150	-.1258	-.3849	-.1509	-.1873	-.0332
165.000				-.1814	-.5173	-.5815	-.0914	.0303	.1675	.2595	.0895	-.4406	-.1176	-.1474	-.0027
180.000	1.1350	.7898	.3421	-.1859	-.5231	-.5765	-.0649	.0070	.1583	.2610	.1711	-.5798	-.1127	-.1227	.0029
270.000		.8710							.4660						

X/LT	.7460	.8530	.9280
PHI			
.000	.0398	.0491	-.1354
30.000	.0385	.0606	-.1333
60.000	.0452	.0835	-.0260
90.000	.0661	.1180	
120.000	.1278	.1065	.1407
135.000	.1288	.1382	.1065
150.000	.1032	.1172	.0419
165.000	.1275	.1374	.0761
180.000	.1323	.1397	-.0817

ALPHAT(4) = 3.950 BETAT (4) = 4.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.1180	.9475	.5285	.0032	-.3830	-.4603	-.5489	.0671	.0923	-.0457	-.2305	-.1130	-.0170	-.0135	-.0091
30.000			.4504	-.0711	-.4433	-.5157	-.4606	.1307	.1501	-.0542	-.3013	-.0851	-.0145	-.0222	-.0183
60.000			.3810	-.1468	-.5006	-.5598	-.0941	.1653	.3050	-.2616	-.3579	-.1138	-.0408	-.0252	-.0198
90.000		.7686	.3286	-.1947	-.5310	-.2760	-.0511	.1304	.5012		-.7124	-.1798	-.0201	-.0927	-.0611
120.000			.2978	-.2124	-.5528	-.5180	-.0838	.1653	.2218	-.2168	-.3878	-.1651	-.0793	-.1179	-.0114
135.000								.0780		.0367		-.2572		-.1417	
150.000			.3054	-.2165	-.5546	-.6036	-.1200	.0070	.2042	.1896	-.2232	-.4522	-.2409	-.2374	-.0447
165.000				-.2052	-.5417	-.6081	-.1262	.0081	.1776	.2333	.0320	-.5783	-.1328	-.1381	-.0352
180.000	1.1180	.7942	.3365	-.1921	-.5300	-.5912	-.1074	.0293	.1333	.2440	.1681	-.5506	-.1245	-.1695	-.0332
270.000		.9687							.4458						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T37)

ALPHAT(4) = 3.990 BETAT (4) = 4.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0237	.0318	-.1362
30.000	.0229	.0405	-.1477
60.000	.0260	.0558	-.0624
90.000	.0492	.0850	
120.000	.0953	.0755	.0299
135.000	.0930	.0952	-.0235
150.000	.0655	.0405	-.1382
165.000	.0975	.1073	.1139
180.000	.1052	.1134	-.0754

ALPHAT(4) = 3.980 BETAT (5) = 8.210

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0800	.9003	.5046	-.0121	-.3920	-.4720	-.5508	-.0059	.0267	-.1002	-.1653	-.2342	-.0412	-.0330	-.0455
30.000			.3667	-.1463	-.4979	-.5741	-.3831	.0248	.1244	-.0466	-.2946	-.0832	-.0292	-.0422	-.0340
60.000			.2707	-.2411	-.5580	-.5212	-.2385	.1763	.3022	-.2145	-.3554	-.0448	-.0445	-.0610	-.0310
90.000		.6526	.2156	-.2822	-.5840	-.1454	-.1291	.1441	.5052		-.7388	-.1262	-.0553	-.0890	-.0445
120.000			.2028	-.2930	-.5942	-.2556	-.0799	.1180	.2417	-.2509	-.3973	-.1502	-.1566	-.1674	-.0491
135.000								.0111		.0369		-.2352		-.1803	
150.000			.2283	-.2766	-.5838	-.2348	-.1247	-.0068	.1835	.1613	-.3101	-.4869	-.2879	-.2685	-.0945
165.000				-.2429	-.5626	-.6175	-.1286	.0057	.1539	.2063	-.0025	-.6493	-.1814	-.1986	-.0956
180.000	1.0800	.6686	.3087	-.2052	-.5317	-.6058	-.1060	.0178	.0954	.2063	.1244	-.5184	-.2005	-.2513	-.1084
270.000		1.0590							.4332						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0240	-.0195	-.1909
30.000	-.0058	.0103	-.1685
60.000	.0021	.0305	-.1045
90.000	.0286	.0721	
120.000	.0577	.0632	.0585
135.000	.0470	.0866	-.0202
150.000	.0101	.0132	-.1346
165.000	.0397	.0580	.1522
180.000	.0251	.0529	-.0890

ARC11-716 IA14 C8+T12+S12N25+AT11 EXTERNAL TANK (RB1T37)

ALPHAT(5) = 7.980 BETAT (1) = -8.190

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0200	.9817	.8076	.0944	-.3069	-.3828	-.3768	.0293	.0381	-.0454	-.1192	-.0718	-.0283	-.0248	-.0250
30.000			.7221	.2017	-.2068	-.2871	-.2502	.0966	.1269	-.1025	-.0717	-.0288	.0286	.0284	.0344
60.000			.7254	.2073	-.1974	-.2669	.0355	.2364	.3114	-.2911	-.1739	-.0513	.0867	.0829	.0699
90.000		1.0020	.6181	.1058	-.2876	-.3492	.0726	.2469	.3418		-.4034	-.2195	.0376	.0477	.0257
120.000			.4499	-.0558	-.4307	-.4770	-.1337	-.0451	-.0751	-.1340	-.3947	-.1877	.0921	.0784	.0577
135.000								-.0646		.0226		-.2545		.0620	
150.000			.3220	-.1811	-.5300	-.5894	-.3258	-.0566	-.0584	.1923	-.0422	-.2809	-.0182	-.0748	.0007
165.000				-.2539	-.5822	-.5421	-.3360	.0079	.0573	.2227	.1075	-.2840	-.0422	-.0979	.0191
180.000	1.0200	.6619	.2042	-.2947	-.6045	-.5358	-.1675	-.0164	.1279	.2240	.1146	-.5401	-.1020	-.1283	-.0057
270.000		.6048							.4374						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0029	.0009	-.1459
30.000	.0572	.0804	-.0929
60.000	.1040	.1474	.0153
90.000	.1383	.1973	
120.000	.1925	.2145	.2413
135.000	.2106	.2559	.3114
150.000	.1623	.2155	.2459
165.000	.1794	.2152	.3101
180.000	.1418	.1723	.0777

ALPHAT(5) = 8.010 BETAT (2) = -4.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0710	1.0420	.6483	.1203	-.2893	-.3685	-.4558	.0815	.1132	.0040	-.1295	-.0264	.0161	.0145	.0207
30.000			.6789	.1501	-.2640	-.3447	-.3328	.1322	.1671	-.0415	-.0959	-.0354	.0263	.0293	.0391
60.000			.6269	.1037	-.3009	-.3750	.0008	.2399	.3252	-.2463	-.1968	-.0876	.0555	.0524	.0468
90.000		.9132	.5095	-.0039	-.3889	-.4601	.0625	.2693	.3552		-.4330	-.3293	-.0324	-.0239	-.0131
120.000			.3784	-.1338	-.4884	-.5593	-.1099	.0442	-.0065	-.1335	-.4046	-.2802	.0427	.0214	.0270
135.000								.0312		.0360		-.3552		.0017	
150.000			.2918	-.2186	-.5453	-.5213	-.3034	.0407	.0355	.2123	-.0086	-.3630	-.0830	-.0940	-.0066
165.000				-.2564	-.5850	-.5487	-.1543	.0132	.1176	.2402	.1037	-.3840	-.0724	-.0719	.0229
180.000	1.0710	.6769	.2262	-.2781	-.5847	-.2829	-.1273	-.0643	.1435	.2279	.1488	-.5916	-.1017	-.0758	.0042
270.000		.7195							.3850						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T37)

ALPHAT(5) = 8.010 BETAT (2) = -4.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0475	.0595	-.0936
30.000	.0705	.0987	-.0651
60.000	.0864	.1396	.0487
90.000	.1215	.2003	
120.000	.1668	.2036	.1908
135.000	.1801	.2238	.1900
150.000	.1506	.1839	.1427
165.000	.1688	.1967	.2266
180.000	.1470	.1698	.0403

ALPHAT(5) = 8.010 BETAT (3) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0860	1.0580	.6520	.1249	-.2848	-.3682	-.4554	.1141	.1323	.0197	-.1641	-.0091	.0124	.0198	.0311
30.000			.6133	.0866	-.3180	-.3999	-.4653	.1341	.1746	-.0112	-.1678	-.0071	.0075	.0113	.0198
60.000			.5140	-.0075	-.3928	-.4658	-.3179	.2496	.3352	-.2003	-.2109	-.0347	.0037	.0096	.0003
90.000		.8191	.3980	-.1140	-.4790	-.5489	-.0800	.2847	.3660		-.5073	-.1751	-.0491	-.0475	-.0012
120.000			.3016	-.2093	-.5441	-.6075	-.1214	.0828	.0612	-.1326	-.4982	-.2424	-.0143	-.0383	.0157
135.000								.0705		.0341		-.3358		-.0591	
150.000			.2582	-.2491	-.5745	-.5481	-.2294	.0682	.1126	.2106	-.0739	-.4093	-.1340	-.1323	-.0271
165.000				-.2617	-.5836	-.6369	-.1719	-.0445	.1766	.2485	.0998	-.4413	-.0967	-.0988	.0190
180.000	1.0860	.6696	.2307	-.2686	-.5943	-.6318	-.1677	-.0255	.1779	.2551	.1766	-.6075	-.1006	-.0751	.0293
270.000		.8234							.3718						

X/LT	.7460	.8530	.9280
PHI			
.000	.0590	.0710	-.0857
30.000	.0574	.0774	-.1021
60.000	.0631	.1045	-.0194
90.000	.0958	.1431	
120.000	.1422	.1477	.1477
135.000	.1435	.1667	.1088
150.000	.1134	.1429	.0510
165.000	.1419	.1608	.1191
180.000	.1465	.1570	-.0581

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T37)

ALPHAT(5) = 8.000 BETAT (4) = 4.130

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0710	1.0360	.6339	.1099	-.2931	-.3709	-.4623	.0808	.1094	-.0026	-.1286	-.0297	.0103	.0126	.0157
30.000			.5282	.0070	-.3808	-.4598	-.4307	.1460	.1584	-.0116	-.2096	-.0266	-.0022	-.0112	-.0048
60.000			.3990	-.1162	-.4803	-.5085	-.3311	.2357	.3354	-.1631	-.2386	.0154	.0024	-.0117	-.0061
90.000		.7156	.2930	-.2175	-.5532	-.5650	-.0821	.3124	.3826		-.4998	-.0764	-.0489	-.0551	.0016
120.000			.2264	-.2761	-.5938	-.6151	-.1114	.1192	.1245	-.1724	-.4850	-.2105	-.0856	-.0848	.0047
135.000								.0776		.0389		-.2520		-.1088	
150.000			.2103	-.2944	-.6039	-.5650	-.1606	.0204	.1669	.1920	-.2140	-.3923	-.2097	-.1895	-.0384
165.000				-.2873	-.5940	-.3709	-.1662	-.0194	.1690	.2293	.0354	-.5229	-.1141	-.0980	-.0094
180.000	1.0710	.6775	.2284	-.2830	-.5922	-.5969	-.1503	-.0030	.1370	.2316	.1622	-.6101	-.1090	-.1000	-.0186
270.000		.9244							.3618						

X/LT	.7460	.8530	.9280
PHI			
.000	.0427	.0601	-.0950
30.000	.0342	.0568	-.1195
60.000	.0304	.0611	-.0950
90.000	.0619	.0560	
120.000	.1001	.0977	.0425
135.000	.0934	.1103	-.0176
150.000	.0621	.0519	-.1347
165.000	.0977	.1114	.1134
180.000	.1077	.1068	-.0883

ALPHAT(5) = 7.990 BETAT (5) = 8.260

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0090	.9816	.6054	.0951	-.3036	-.3775	-.4342	-.0240	.0429	-.0556	-.1208	-.0819	-.0232	-.0228	-.0299
30.000			.4303	-.0762	-.4503	-.5230	-.5926	.0173	.1088	-.0166	-.2165	-.0752	-.0351	-.0438	-.0386
60.000			.2744	-.2281	-.5611	-.5139	-.2979	.1601	.3263	-.1235	-.2564	-.0002	.0025	-.0154	-.0084
90.000		.5965	.1793	-.3080	-.5652	-.4904	-.1326	.2491	.4046		-.4092	.0138	-.0267	-.0684	-.0194
120.000			.1416	-.3370	-.5639	-.4567	-.0930	.1173	.1617	-.1641	-.4214	-.1958	-.1234	-.1343	-.0384
135.000								.0226		.0371		-.2263		-.1617	
150.000			.1517	-.3445	-.6307	-.2233	-.1802	-.0533	.1801	.1576	-.2496	-.4155	-.2651	-.2297	-.0783
165.000				-.3225	-.6241	-.2560	-.1676	-.0418	.1389	.1919	-.0090	-.4242	-.1586	-.1722	-.0809
180.000	1.0090	.5420	.2015	-.3064	-.6044	-.6392	-.1630	-.0251	.0804	.1737	.0972	-.4886	-.1575	-.2183	-.0925
270.000		1.0080							.3505						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 OI+T12+S12N25+AT11 EXTERNAL TANK (RB1T37)

ALPHAT(5) = 7.990 BETAT (5) = 8.260

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0067	.0049	-.1454
30.000	-.0149	.0079	-.1483
60.000	.0246	.0572	-.0736
90.000	.0504	.0739	
120.000	.0648	.0826	.0367
135.000	.0561	.0920	-.0262
150.000	.0135	.0192	-.1297
165.000	.0455	.0682	.1280
180.000	.0322	.0498	-.1133

ARC11-716 IA14 OL+T12+SIZE85+AT11 EXTERNAL TANK (RB1T38) (14 FEB 74)

REFERENCE DATA

SREF = 8.4210 SQ.FT. XMRP = 29.5800 INCHES
LREF = 36.7090 INCHES YMRP = .0000 INCHES
BREF = 36.7090 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 1.090 ELEVON = .000
RUDDER = .000 SPOBRK = .000

ALPHAT(1) = -8.600 BETAT (1) = -8.150

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0650	.8907	.3004	-.1639	-.5091	-.5484	-.4826	-.1242	.0767	-.0092	-.2262	-.3079	-.1287	-.0841	-.0904
30.000			.3891	-.0867	-.4388	-.5078	-.5312	-.1688	-.0503	-.2681	-.4107	-.2074	-.1747	-.1520	-.1098
60.000			.5339	.0550	-.3280	-.3979	-.3508	-.0074	-.1150	-.5452	-.6631	-.3568	-.1166	.0127	-.0678
90.000		1.0670	.6982	.2118	-.1963	-.2704	.0300	.3574	.4177		-.4877	-.4990	-.1644	-.0883	-.0822
120.000			.8051	.3163	-.1066	-.1857	-.1268	.3625	.4749	.0383	.2527	.1504	.0407	-.0678	-.1166
135.000								.3380		.3007		.0963		-.0704	
150.000			.8250	.3308	-.0914	-.1708	-.1711	.2965	.3683	.4700	.3638	.0091	-.1182	-.1999	-.1747
165.000				.2763	-.1281	-.2085	-.2806	.2210	.3320	.4854	.3907	-.0580	-.0949	-.2220	-.2136
180.000	1.0653	1.1290	.7172	.2191	-.1772	-.2529	-.3094	.1753	.3164	.4698	.3388	-.1937	-.1657	-.3147	-.2519
270.000		.6982							.4181						

X/LT	.7480	.8580	.9280
PHI			
.000	-.0415	.0804	-.0856
30.000	-.0623	.0610	-.0438
60.000	-.0212	.0497	.0067
90.000	.0307	-.0549	
120.000	.1161	-.0137	.3398
135.000	.1187	.1100	.3329
150.000	.0724	.1340	.1671
165.000	.0578	.1390	.4348
180.000	.0192	.1116	.1612

ALPHAT(1) = -8.580 BETAT (2) = -5.070

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1030	.7228	.3188	-.1481	-.4490	-.5062	-.4521	-.0890	.0915	.0107	-.2148	-.3686	-.0976	-.0530	-.0654
30.000			.3776	-.1030	-.4180	-.4799	-.5305	-.1060	.0256	-.1986	-.3734	-.2066	-.1656	-.1149	-.1070
60.000			.4846	-.0025	-.3411	-.4087	-.4326	-.0162	-.0410	-.4769	-.6563	-.3324	-.1080	-.0132	-.0573
90.000		1.0070	.6227	.1318	-.2376	-.3197	-.2118	.3521	.4035		-.4898	-.5280	-.1516	-.1057	-.1009
120.000			.7356	.2416	-.1463	-.2255	-.3066	.3624	.4852	.0849	.2127	.0821	-.0184	-.1141	-.1780
135.000								.3140		.3160		.0330		-.1270	
150.000			.7864	.2859	-.1102	-.1881	-.3113	.2905	.3910	.4675	.2430	-.0794	-.1384	-.2514	-.2249

ARC11-716 IA14 OI+T12+S12NE5+AT11 EXTERNAL TANK (RB1T38)

ALPHAT(1) = -8.980 BETAT (2) = -5.070

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
165.000				.2746	-.1202	-.2018	-.3021	.2591	.3670	.4979	.3530	-.1431	-.1371	-.2740	-.2814
180.000	1.1030	1.1400	.7429	.2429	-.1491	-.2235	-.3184	.1936	.3581	.4937	.3485	-.2013	-.1915	-.2935	-.2890
270.000		.7886							.4068						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0252	.0635	-.0965
30.000	-.0387	.0648	-.0423
60.000	-.0032	.0758	.0265
90.000	.0425	.0504	
120.000	.0856	-.0509	.2888
135.000	.0793	.0742	.2596
150.000	.0376	.0904	.1164
165.000	.0447	.1067	.3299
180.000	.0141	.0882	.1245

ALPHAT(1) = -8.580 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1300	.7488	.3344	-.1443	-.4400	-.4937	-.3155	-.1125	.0579	.0436	-.1884	-.3934	-.0790	-.0374	-.0489
30.000			.3487	-.1205	-.4317	-.4901	-.4668	-.0552	.0806	-.0842	-.3059	-.2490	-.1113	-.0788	-.0781
60.000			.4034	-.0799	-.4046	-.4599	-.4461	.0144	.0430	-.4080	-.6335	-.2892	-.2469	-.0857	-.0568
90.000		.8994	.4996	.0117	-.3335	-.4005	-.0321	.1317	.4238		-.4717	-.5611	-.1346	-.1137	-.1381
120.000			.6134	.1251	-.2469	-.3214	-.4043	.2424	.5089	.1741	.1507	-.0163	-.1092	-.1758	-.2370
135.000								.2733		.3336		-.0512		-.2344	
150.000			.7052	.2037	-.1833	-.2589	-.3034	.2885	.4071	.4586	.1191	-.2525	-.1821	-.3758	-.3093
165.000				.2413	-.1515	-.2300	-.2672	.2937	.3903	.5039	.2871	-.2067	-.1299	-.2787	-.2468
180.000	1.1300	1.1440	.7557	.2491	-.1458	-.2197	-.3184	.1948	.3929	.4961	.3660	-.2035	-.0828	-.2473	-.2423
270.000		.8926							.4013						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0112	.0561	-.1197
30.000	-.0219	.0535	-.0824
60.000	.0154	.0728	.0830
90.000	.0167	.0681	
120.000	.0321	.0130	.0938
135.000	.0076	.0587	.0517
150.000	-.0004	.0234	-.0567

ARC11-716 IA14 OI+T12+S12NB5+AT11 EXTERNAL TANK (RB1T30)

ALPHAT(1) = -8.560 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
65.000	.0143	.0650	.1784
180.000	.0145	.0708	.0808

ALPHAT(1) = -8.570 BETAT (4) = 4.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1140	.7327	.3276	-.1381	-.4399	-.4995	-.2536	-.1274	.0691	.0623	-.1893	-.3789	-.0838	-.0417	-.0988
30.000			.3166	-.1616	-.4476	-.5044	-.4389	-.1018	.1166	-.0131	-.2903	-.3077	-.0844	-.0801	-.0819
60.000			.3320	-.1355	-.4368	-.4647	-.4218	.0193	.0889	-.2368	-.6170	-.2578	-.1823	-.1171	-.0777
90.000		.7969	.3947	-.0860	-.4048	-.4577	-.1054	.0720	.4469		-.4817	-.5664	-.1506	-.1245	-.1268
120.000			.4993	.0176	-.3256	-.3991	-.2305	.1151	.5145	.2449	.1014	-.0693	-.1369	-.2330	-.1918
135.000								.1621		.3273		-.1273		-.2976	
150.000			.6150	.1239	-.2436	-.3178	-.4163	.1858	.3808	.4115	-.0176	-.3544	-.2683	-.4566	-.2492
165.000				.2022	-.1602	-.2590	-.3603	.1762	.3570	.4591	.2603	-.2934	-.1240	-.2348	-.2237
180.000	1.1140	1.1370	.7440	.2468	-.1446	-.2224	-.3093	.1709	.3594	.4677	.3641	-.2243	-.1150	-.2863	-.2550
270.000		.9656							.3969						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0342	.0589	-.1042
30.000	-.0313	.0802	-.1100
60.000	-.0037	.0819	.0526
90.000	-.0456	.0013	
120.000	-.0439	-.0005	-.0111
135.000	-.0994	.0102	-.0565
150.000	-.0742	-.0393	-.1599
165.000	-.0406	.0231	.0808
180.000	-.0259	.0367	-.0741

ARC11-716 IA14 OL+T12+S12N2S+AT11 EXTERNAL TANK (RB1T36)

ALPHAT(1) = -8.600 BETAT (5) = 8.200

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0610	.6790	.2923	-.1677	-.4699	-.5236	-.1962	-.1441	.0527	.0096	-.2159	-.3078	-.1300	-.0889	-.0901
30.000			.2375	-.2023	-.4808	-.5334	-.1968	-.0839	.0961	-.0162	-.3024	-.3371	-.1129	-.0849	-.0974
60.000			.2564	-.2041	-.4803	-.4397	-.0870	-.0681	.0517	-.1911	-.6054	-.2503	-.1395	-.1113	-.1061
90.000		.6822	.2953	-.1646	-.4692	-.3687	-.1004	-.1861	.4649		-.4820	-.5667	-.1923	-.1383	-.1684
120.000			.3904	-.0801	-.4085	-.4743	-.1853	.0119	.5227	.2693	.0782	-.1157	-.1855	-.2889	-.2517
135.000								.0389		.3011		-.2076		-.3497	
150.000			.5218	.0409	-.3175	-.3821	-.4889	.0540	.3337	.3186	-.1039	-.5081	-.3844	-.3095	-.2951
165.000				.1482	-.2256	-.3005	-.3982	.0650	.2784	.3826	.2219	-.4393	-.1493	-.2624	-.2961
180.000	1.0610	1.0510	.7167	.2209	-.1634	-.2404	-.2792	.1147	.2714	.4186	.3430	-.2387	-.1749	-.3697	-.3148
270.000		1.0590							.4034						

X/LT	.7480	.8330	.9280
PHI			
.000	-.0415	.0503	-.0918
30.000	-.0265	.0626	-.1089
60.000	-.0118	.0790	.0351
90.000	-.1240	-.1390	
120.000	-.1009	-.0398	-.0278
135.000	-.1198	-.0021	-.0512
150.000	-.1395	-.0682	-.1898
165.000	-.1219	-.0155	.0914
180.000	-.1217	-.0250	-.0465

ALPHAT(2) = -4.450 BETAT (1) = -8.170

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1210	.7957	.4020	-.0828	-.4079	-.4663	-.4565	-.1734	.0615	-.0297	-.2454	-.2601	-.0846	-.0483	-.0818
30.000			.3013	.0112	-.3317	-.4073	-.4763	-.1394	.0226	-.2242	-.3580	-.1508	-.1475	-.1114	-.0727
60.000			.6238	.1266	-.2406	-.3129	-.3068	.1537	.0986	-.4694	-.5680	-.2793	-.1188	.0359	-.0167
90.000		1.1130	.7256	.2285	-.1605	-.2370	-.2347	.3873	.5011		-.6087	-.4904	-.1217	-.0522	-.0399
120.000			.7633	.2657	-.1313	-.2120	-.3084	.3162	.3920	-.1060	.1726	.1530	.0492	-.0569	-.0970
135.000								.2978		.1697		.0969		-.0801	
150.000			.7370	.2356	-.1566	-.2352	-.2651	.2065	.2833	.3766	.3008	-.0365	-.1211	-.1933	-.1588
165.000				.1770	-.2047	-.2794	-.3592	.0892	.2572	.4227	.3402	-.0843	-.0982	-.2151	-.1908
180.000	1.1210	1.0470	.6211	.1225	-.2429	-.3165	-.3962	.0560	.2546	.4274	.2992	-.2337	-.1681	-.3155	-.2234
270.000		.7463							.5690						

X/LT	.7480	.8330	.9280
PHI			

ARC11-716 IA14 C2+T12+S12M2S+AT11 EXTERNAL TANK (RB1T30)

ALPHAT(1) = -4.490 BETAT (1) = -8.170

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	-.0705	.0533	-.0875
30.000	-.0007	.0007	-.0571
60.000	-.0007	.1368	.0434
90.000	.0699	.1167	
120.000	.1236	.1172	.3784
135.000	.1311	.2096	.3842
150.000	.0835	.2091	.5179
165.000	.0946	.2068	.4904
180.000	.0580	.1824	.1840

ALPHAT(2) = -4.430 BETAT (2) = -4.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.16>	.0414	.4301	-.0642	-.3889	-.4510	-.5178	-.0781	.0842	.0318	-.1954	-.3413	-.0504	-.0029	-.0310
30.000			.4796	-.0215	-.3535	-.4252	-.4984	-.1175	.1146	-.1749	-.2909	-.2112	-.1115	-.0689	-.0629
60.000			.5526	.0516	-.3033	-.3719	-.3719	.0846	.1489	-.4318	-.5687	-.2411	-.2077	-.0271	-.0175
90.000		1.0370	.6289	.1277	-.2449	-.3178	-.3961	.3588	.9094		-.5946	-.5376	-.1310	-.0695	-.0742
120.000			.6764	.1759	-.20E5	-.2839	-.3556	.3120	.4216	-.0417	.1195	.0546	-.0233	-.1114	-.1640
135.000								.1807		.2136		-.0036		-.1256	
150.000			.6886	.1837	-.2002	-.2723	-.3695	.1314	.3404	.3963	.1504	-.1298	-.1435	-.2488	-.2259
165.000				.1655	-.2102	-.2904	-.3890	.0892	.3153	.4449	.3008	-.2036	-.1424	-.2757	-.2093
180.000	1.1800	1.0640	.6443	.1382	-.2333	-.3072	-.3982	.0525	.3027	.4483	.3175	-.2438	-.1593	-.2270	-.1993
270.000		.8497							.5695						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0505	.0652	-.0968
30.000	-.0473	.0776	-.0480
60.000	-.0037	.1255	.0416
90.000	.0427	.1490	
120.000	.0867	.0454	.3014
135.000	.0801	.1477	.2941
150.000	.0504	.1488	.2232
165.000	.0627	.1630	.3082
180.000	.0316	.1329	.1212

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T38)

ALPHAT(2) = -4.430 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1840	.8550	.4349	-.0497	-.3795	-.4446	-.5143	-.0694	.0930	.0737	-.1670	-.3367	-.0340	.0044	-.0189
30.000			.4435	-.0429	-.3715	-.4369	-.5094	-.0548	.1334	-.0303	-.2444	-.3053	-.0737	-.0244	-.0489
60.000			.4778	-.0217	-.3522	-.4193	-.3993	-.0715	.1948	-.3807	-.5528	-.1934	-.1461	-.0989	-.0446
90.000		.9477	.5284	.0265	-.3194	-.3881	-.4053	.3127	.5192		-.5936	-.5661	-.1277	-.0837	-.1110
120.000			.5849	.0863	-.2770	-.3485	-.4289	.0974	.4630	.0359	.0756	-.0226	-.0937	-.1554	-.2120
135.000								.1089		.2622		-.0672		-.1978	
150.000			.6303	.1273	-.2437	-.3147	-.4263	.1024	.3365	.3698	.0748	-.2489	-.1746	-.3307	-.2892
165.000				.1460	-.2295	-.3077	-.3977	.1115	.3237	.4302	.2401	-.2476	-.1190	-.2436	-.2273
180.000	1.1840	1.0660	.6540	.1491	-.2293	-.3026	-.3949	.0595	.3036	.4260	.3264	-.2516	-.0787	-.2459	-.2304
270.000		.9480							.5286						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0266	.0732	-.0915
30.000	-.0370	.0737	-.0781
60.000	.0021	.1078	.0555
90.000	.0229	.1180	
120.000	.0501	.0559	.1374
135.000	.0357	.1042	.0985
150.000	.0231	.0765	-.0267
165.000	.0400	.1069	.1661
180.000	.0419	.1100	.0459

ALPHAT(2) = -4.430 BETAT (4) = 4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1680	.8370	.4242	-.0662	-.3831	-.4515	-.5232	-.1016	.1010	.0559	-.1939	-.3466	-.0456	-.0048	-.0384
30.000			.3997	-.0843	-.4046	-.4670	-.5330	-.0793	.1175	.0268	-.2604	-.2773	-.0366	-.0100	-.0408
60.000			.3973	-.0858	-.4038	-.4621	-.4172	-.1043	.2321	-.3077	-.5286	-.1641	-.0874	-.0824	-.0832
90.000		.8487	.4260	-.0625	-.3875	-.4440	-.0864	-.0134	.5479		-.5315	-.4777	-.1462	-.1009	-.1119
120.000			.4825	-.0103	-.3490	-.4152	-.0139	.0473	.2510	.1385	.0530	-.0745	-.1227	-.2101	-.1762
135.000								.0423		.2707		-.1430		-.2720	
150.000			.5534	.0549	-.2998	-.3686	-.1943	.0259	.2754	.3444	-.0478	-.3734	-.2628	-.4266	-.2349
165.000				.1087	-.2604	-.3334	-.4298	.0861	.2746	.3972	.2211	-.3334	-.1193	-.2394	-.2028
180.000	1.1680	1.0650	.6457	.1420	-.2345	-.3075	-.4019	.0756	.2760	.4043	.3332	-.2697	-.0982	-.2857	-.2286
270.000		1.0390							.4963						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+A111 EXTERNAL TANK (RB1T38)

ALPHAT(2) = -4.490 BETAT (4) = 4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0556	.0600	-.0905
30.000	-.0319	.0781	-.0887
60.000	-.0269	.0862	.0407
90.000	-.0171	.0632	
120.000	-.0171	.0339	.0214
135.000	-.0355	.0472	-.0295
150.000	-.0392	-.0006	-.1294
165.000	-.0382	.0637	.0927
180.000	-.0009	.0773	-.0571

ALPHAT(2) = -4.490 BETAT (5) = 8.160

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1140	.7830	.3890	-.0934	-.4127	-.4738	-.5483	-.1580	.0462	-.0301	-.2348	-.2721	-.0901	-.0807	-.0908
30.000			.3286	-.1377	-.4461	-.5067	-.5517	-.1394	.0957	.0143	-.2678	-.2544	-.0422	-.0343	-.0650
60.000			.3111	-.1670	-.4541	-.5033	-.2559	-.0861	.1585	-.2292	-.4004	-.1622	-.0702	-.0602	-.0861
90.000		.7424	.3260	-.1384	-.4490	-.0988	-.0483	-.0536	.3437		-.5161	-.3479	-.1656	-.1269	-.1408
120.000			.3791	-.1010	-.4207	-.2461	-.0355	-.0397	.2129	.1518	.0490	-.1411	-.1910	-.2395	-.2137
135.000								-.0412		.2722		-.2275		-.3253	
150.000			.4663	-.0255	-.3630	-.4293	-.2191	-.0266	.2307	.2918	-.0734	-.5197	-.3807	-.4796	-.2593
165.000				.0542	-.3014	-.3755	-.4692	.0297	.2030	.3402	.1792	-.5052	-.1672	-.2722	-.2664
180.000	1.1140	.9532	.6159	.1138	-.2536	-.3309	-.4209	.0473	.1998	.3488	.3080	-.2697	-.1358	-.3653	-.2953
270.000		1.1140							.4866						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0821	.0461	-.0928
30.000	-.0474	.0732	-.0964
60.000	-.0379	.0779	-.0019
90.000	-.0666	-.0043	
120.000	-.0584	.0015	.0035
135.000	-.0759	.0409	-.0260
150.000	-.0849	-.0237	-.1542
165.000	-.0791	.0278	.1343
180.000	-.0867	.0234	-.0689

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T38)

ALPHAT(3) = -.540 BETAT (1) = -8.170

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1400	.8880	.4944	.0024	-.3448	-.4121	-.4847	-.3886	.0824	-.0115	-.2184	-.2175	-.1202	-.0202	-.0025
30.000			.6018	.1028	-.2605	-.3399	-.4229	-.1071	.0915	-.1502	-.2981	-.1349	-.1314	-.0959	-.0491
60.000			.6965	.1923	-.1886	-.2667	-.2689	.1969	.2169	-.3614	-.3819	-.1710	-.1475	.0074	.0191
90.000		1.1310	.7410	.2361	-.1545	-.2359	-.2239	.4077	.5302		-.5752	-.4699	-.1514	-.0750	-.0089
120.000			.7111	.2105	-.1757	-.2551	-.3394	.2227	.2859	-.2522	-.0673	.1885	.1022	-.0193	-.0419
135.000								.1273		.0078		.0860		-.0344	
150.000			.6476	.1483	-.2269	-.3042	-.3912	.0346	.1834	.2763	.2235	-.0752	-.0896	-.1619	-.1090
165.000				.0800	-.2822	-.3544	-.4190	-.2283	.1735	.3466	.2806	-.0968	-.0756	-.1929	-.1219
180.000	1.1400	.9636	.5258	.0280	-.3153	-.3865	-.4311	-.0703	.1826	.3654	.2519	-.2583	-.1325	-.2849	-.1482
270.000		.7610							.6718						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0806	.0566	-.0928
30.000	-.0451	.0820	-.0634
60.000	.0236	.1678	.0552
90.000	.0874	.1443	
120.000	.1522	.1984	.4303
135.000	.1673	.2748	.4151
150.000	.1341	.2568	.3624
165.000	.1378	.2556	.4363
180.000	.1005	.2042	.1914

ALPHAT(3) = -.530 BETAT (2) = -4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1890	.9365	.5257	.0161	-.3231	-.3916	-.4726	-.3517	.1378	.0644	-.1702	-.2805	-.0832	.0097	-.0056
30.000			.5739	.0679	-.2887	-.3608	-.4421	-.2380	.1630	-.0493	-.2383	-.1854	-.0995	-.0355	-.0358
60.000			.6189	.1122	-.2545	-.3269	-.3406	.0390	.2617	-.3123	-.4266	-.1402	-.1280	-.0818	-.0019
90.000		1.0550	.6431	.1382	-.2362	-.3117	-.3123	.3682	.5425		-.5755	-.5410	-.1753	-.0956	-.0361
120.000			.6316	.1301	-.2442	-.3181	-.3953	.1551	.3330	-.1824	-.0875	.0613	.0280	-.0742	-.1079
135.000								-.0483		.1020		-.0354		-.0877	
150.000			.6058	.1031	-.2654	-.3370	-.4186	-.1082	.2582	.3149	.0904	-.1183	-.0939	-.1990	-.1692
165.000				.0711	-.2874	-.3575	-.4501	-.0244	.2329	.3762	.2403	-.1960	-.0976	-.2102	-.1337
180.000	1.1890	.9805	.5496	.0433	-.3039	-.3753	-.4591	-.0223	.1987	.3694	.2701	-.2694	-.0897	-.1885	-.1553
270.000		.8717							.5986						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T38)

ALPHAT(3) = -.530 BETAT (2) = -4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0399	.0764	-.0748
30.000	-.0336	.0955	-.0467
60.000	.0144	.1306	.0337
90.000	.0654	.1652	
120.000	.1125	.1542	.3345
135.000	.1151	.2263	.3348
150.000	.0989	.2153	.2750
165.000	.1077	.2238	.3202
180.000	.0816	.1883	.1392

ALPHAT(3) = -.320 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1990	.9479	.5310	.0203	-.3199	-.3859	-.4653	-.3841	.1435	.0878	-.1496	-.2862	-.0690	.0202	-.0012
30.000			.5315	.0208	-.3212	-.3900	-.4643	-.1552	.1492	.0285	-.2161	-.2910	-.0666	.0035	-.0122
60.000			.5330	.0240	-.3184	-.3831	-.4576	-.0088	.2923	-.2614	-.4182	-.1516	-.0631	-.0539	-.0498
90.000		.9607	.5392	.0372	-.3150	-.3815	-.3673	.2192	.5584		-.6060	-.5466	-.1673	-.1061	-.0632
120.000			.5442	.0429	-.3108	-.3776	-.3988	.0519	.3663	-.1059	-.1174	-.0307	-.0515	-.1195	-.1567
135.000								.0304		.1578		-.1107		-.1523	
150.000			.5538	.0476	-.3059	-.3683	-.4744	.0179	.2678	.3333	-.0388	-.2524	-.1317	-.2575	-.2311
165.000				.0471	-.2994	-.3696	-.4605	.0229	.2273	.3587	.1943	-.2902	-.0964	-.1983	-.1712
180.000	1.1990	.9773	.5551	.0497	-.3026	-.3696	-.4592	-.0177	.2184	.3524	.2765	-.3150	-.0565	-.1820	-.1622
270.000		.9648							.5639						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0232	.0888	-.0694
30.000	-.0226	.0933	-.0595
60.000	-.0085	.1207	.0121
90.000	.0484	.1389	
120.000	.0821	.1003	.1997
135.000	.0687	.1491	.1503
150.000	.0497	.1337	.0851
165.000	.0724	.1516	.1415
180.000	.0747	.1535	.0241

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T38)

ALPHAT(3) = -.520 BETAT (4) = 4.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.1820	.9267	.5147	.0153	-.3272	-.3959	-.4753	-.4126	.1393	.0663	-.1703	-.2874	-.0919	.0118	-.0094
30.000			.4667	-.0288	-.3601	-.4277	-.4838	-.2833	.1992	.0506	-.2221	-.3239	-.0358	.0118	-.0180
60.000			.4378	-.0551	-.3780	-.4370	-.5271	-.0414	.3898	-.2010	-.3878	-.1719	-.0562	-.0110	-.0388
90.000		.8607	.4340	-.0504	-.3863	-.4308	-.3837	.0745	.5780		-.5897	-.1798	-.0806	-.0694	-.0815
120.000			.4488	-.0420	-.3746	-.4344	-.4165	-.0302	.3801	-.0365	-.1119	-.0715	-.0880	-.1679	-.1395
135.000								-.0294		.2021		-.1594		-.2098	
150.000			.4890	-.0186	-.3521	-.4142	-.2150	-.0131	.1445	.2756	-.0990	-.4044	-.2216	-.3495	-.2006
165.000				.0140	-.3277	-.3987	-.4819	-.0084	.1780	.3127	.1749	-.3864	-.0970	-.1983	-.1526
180.000	1.1820	.9767	.5484	.0403	-.3117	-.3798	-.4698	.0068	.1866	.3302	.2918	-.3191	-.0734	-.2433	-.1698
270.000		1.0560							.5362						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0478	.0730	-.0757
30.000	-.0349	.0908	-.0883
60.000	-.0225	.1005	.0175
90.000	.0097	.1110	
120.000	.0290	.0772	.0504
135.000	.0146	.0887	.0000
150.000	-.0005	.0440	-.0996
165.000	.0304	.0998	.1286
180.000	.0443	.1165	-.0236

ALPHAT(3) = -.530 BETAT (5) = 8.180

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.1320	.8770	.4866	-.0081	-.3439	-.4163	-.4979	-.3472	.0604	-.0104	-.2136	-.2254	-.1733	-.0355	-.0661
30.000			.3947	-.0891	-.4124	-.4735	-.5351	-.0908	.0913	.0405	-.2250	-.3131	-.0427	-.0016	-.0401
60.000			.3507	-.1308	-.4347	-.4914	-.4602	-.0478	.2547	-.1560	-.3923	-.1580	-.0276	-.0230	-.0637
90.000		.7578	.3338	-.1442	-.4406	-.5010	-.3834	.0709	.5931		-.5862	-.3664	-.1251	-.0950	-.1208
120.000			.3535	-.1153	-.4306	-.4922	-.1029	-.0852	.1138	.0478	-.1598	-.1356	-.1497	-.2191	-.1735
135.000								-.0487		.0956		-.2333		-.2551	
150.000			.4078	-.0839	-.4029	-.4645	-.0489	-.0312	.1115	.2587	-.0925	-.5086	-.2847	-.4115	-.2129
165.000				-.0316	-.3643	-.4306	-.1291	-.0314	.1418	.2574	.1331	-.5408	-.1428	-.2543	-.2103
180.000	1.1320	.8609	.5195	.0201	-.3224	-.3967	-.4767	.0186	.1269	.2666	.2522	-.3112	-.1796	-.3139	-.2508
270.000		1.1370							.5242						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25+AT11 EXTERNAL TANK (RB1T38)

ALPHAT(3) = -.530 BETAT (5) = 8.180

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0851	.0546	-.0973
30.000	-.0488	.0814	-.0850
60.000	-.0417	.0955	.0305
90.000	-.0251	.0825	
120.000	-.0131	.0580	.0809
135.000	-.0282	.0835	.0279
150.000	-.0400	.0248	-.1102
165.000	-.0327	.0584	.1805
180.000	-.0416	.0592	-.0572

ALPHAT(4) = 3.950 BETAT (1) = -8.200

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1230	.9763	.5965	.1049	-.2639	-.3401	-.4255	-.3509	.0985	.0095	-.1535	-.1900	-.1390	-.0263	-.0367
30.000			.7098	.2099	-.1787	-.2590	-.3504	-.0088	.1424	-.0748	-.1396	-.1129	-.0804	-.0511	-.0140
60.000			.7643	.2618	-.1360	-.2145	-.2493	.2808	.3202	-.2468	-.2336	-.0981	-.0060	-.0212	.0168
90.000		1.1190	.7354	.2360	-.1593	-.2389	-.2220	.3913	.4912		-.4154	-.3666	-.3629	-.2162	-.0443
120.000			.6338	.1391	-.2375	-.3137	-.3732	.1170	.1241	-.4146	-.5203	-.1621	.2095	.0898	.0285
135.000								-.0222		-.2014		-.1554		.0550	
150.000			.5319	.0401	-.3147	-.3846	-.4738	-.0784	.0566	.2004	.0839	-.2059	.0547	-.0909	-.0483
165.000				-.0348	-.3699	-.4387	-.4438	-.2212	.0926	.2904	.1817	-.1745	-.0005	-.1189	-.0536
180.000	1.1230	.8536	.4100	-.0770	-.3999	-.4613	-.4491	-.1441	.1319	.3027	.1887	-.3122	-.0966	-.1380	-.0862
270.000		.7403							.5223						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0857	.0500	-.1132
30.000	-.0068	.1059	-.0714
60.000	.0562	.1958	.0462
90.000	.0842	.0706	
120.000	.2037	.2726	.4944
135.000	.2121	.3421	.4730
150.000	.1830	.3008	.4252
165.000	.1869	.3017	.4498
180.000	.1490	.2421	.2024

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T38)

ALPHAT(4) = 3.960 BETAT (2) = -4.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1750	1.0360	.6376	.1291	-.2442	-.3159	-.4062	-.3526	.2018	.1012	-.1097	-.2130	-.1331	.0030	.0248
30.000			.6769	.1693	-.2100	-.2885	-.3757	-.2885	.2225	.0866	-.1343	-.1937	-.0982	-.0036	.0232
60.000			.6777	.1701	-.2087	-.2807	-.3891	.1302	.3545	-.1913	-.2435	-.1717	-.0263	.0116	.0277
90.000		1.0360	.6319	.1304	-.2436	-.3177	-.3292	.3387	.5057		-.4978	-.2342	-.0127	-.0442	-.0384
120.000			.5586	.0616	-.2993	-.3677	-.4343	.0753	.1903	-.3262	-.4296	-.2070	.0855	.0193	-.0480
135.000								-.1194		-.0131		-.3203		-.0108	
150.000			.4999	.0013	-.3413	-.4086	-.4551	-.1961	.1472	.2450	.0953	-.3224	-.0067	-.1233	-.0907
165.000				-.0378	-.3728	-.4352	-.5063	-.0863	.1367	.2990	.1923	-.2199	-.0447	-.1251	-.0680
180.000	1.1750	.8681	.4382	-.0626	-.3837	-.4495	-.3216	-.0873	.0951	.2802	.2321	-.3314	-.0712	-.1101	-.0875
270.000		.8530							.5825						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0106	.1079	-.0127
30.000	.0098	.1280	-.0096
60.000	.0396	.1672	.0557
90.000	.0776	.1659	
120.000	.1514	.2339	.3545
135.000	.1600	.2817	.3443
150.000	.1463	.2514	.2996
165.000	.1596	.2549	.3485
180.000	.1298	.2209	.1407

ALPHAT(4) = 3.960 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1920	1.0520	.6462	.1380	-.2336	-.3085	-.3964	-.3435	.2184	.1226	-.0998	-.1986	-.1368	.0116	.0286
30.000			.6270	.1203	-.2488	-.3235	-.4072	-.3202	.2393	.0818	-.1634	-.2055	-.0996	.0009	.0215
60.000			.5861	.0792	-.2788	-.3473	-.4471	.0589	.3682	-.1286	-.2341	-.1588	-.0610	-.0153	.0024
90.000		.9501	.5317	.0318	-.3163	-.3863	-.4240	.1975	.5295		-.5754	-.2235	-.0764	-.0829	-.0598
120.000			.4830	-.0124	-.3455	-.4145	-.4240	-.0536	.2419	-.2690	-.3613	-.1485	.0205	-.0516	-.0847
135.000								-.0722		.0526		-.2948		-.0721	
150.000			.4598	-.0350	-.3659	-.4274	-.4990	-.0518	.1774	.2672	-.0288	-.3497	-.0579	-.1589	-.1441
165.000				-.0437	-.3713	-.4375	-.5147	-.0405	.1218	.2978	.1868	-.2752	-.0587	-.1116	-.0875
180.000	1.1920	.8712	.4455	-.0447	-.3765	-.4458	-.5137	-.0308	.1301	.2887	.2524	-.3967	-.0597	-.0955	-.0763
270.000		.9542							.5271						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T38)

ALPHAT(4) = 3.860 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0111	.1139	-.0114
30.000	.0095	.1238	-.0155
60.000	.0173	.1436	.0609
90.000	.0576	.1543	
120.000	.1179	.1673	.2104
135.000	.1103	.1942	.1739
150.000	.0943	.1786	.1172
165.000	.1170	.1895	.1373
180.000	.1183	.1895	.0170

ALPHAT(4) = 3.950 BETAT (4) = 4.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1720	1.0250	.6226	.1255	-.2448	-.3159	-.4056	-.3557	.1914	.0976	-.1066	-.2166	-.1472	.0034	.0227
30.000			.5508	.0535	-.3047	-.3724	-.4500	-.3709	.2786	.0976	-.1936	-.2116	-.1198	.0070	.0128
60.000			.4813	-.0159	-.3527	-.4157	-.5032	-.0320	.3992	-.0790	-.2679	-.1279	-.0734	-.0273	-.0165
90.000		.8506	.4309	-.0586	-.3852	-.4467	-.2283	-.0050	.5705		-.5935	-.1501	-.1322	-.0817	-.0457
120.000			.4025	-.0756	-.4038	-.4601	-.4359	-.0285	.2509	-.1790	-.3106	-.0909	-.0579	-.1056	-.0790
135.000								-.0848		.1104		-.2126		-.1235	
150.000			.4064	-.0733	-.4033	-.4570	-.3247	-.0924	.1284	.2590	-.0927	-.4222	-.1628	-.2389	-.1336
165.000				-.0679	-.3904	-.4526	-.4403	-.0696	.1222	.2775	.1306	-.4072	-.0782	-.1167	-.0842
180.000	1.1720	.8714	.4389	-.0578	-.3939	-.4451	-.5195	-.0576	.1295	.2780	.2477	-.3834	-.0642	-.1330	-.0979
270.000		1.0450							.5096						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0141	.1007	-.0118
30.000	-.0172	.1103	-.0230
60.000	-.0167	.1168	.0224
90.000	.0449	.1341	
120.000	.0736	.1231	.0633
135.000	.0629	.1286	.0216
150.000	.0537	.0795	-.0770
165.000	.0774	.1389	.1571
180.000	.0947	.1498	-.0110

ARC11-716 IA14 Q1+T12+S12N25+AT11 EXTERNAL TANK (RB1T38)

ALPHAT(4) = 5.980 BETAT (5) = 8.230

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.1200	.9767	.9975	.1055	-.2616	-.3372	-.4243	-.3600	.0884	.0048	-.1385	-.2080	-.1716	-.0263	-.0290
30.000			.4688	-.0199	-.3575	-.4267	-.5025	-.1082	.1497	.0846	-.1814	-.2180	-.1062	.0114	-.0210
60.000			.3738	-.1035	-.4251	-.4594	-.4293	-.0938	.2525	-.0455	-.2730	-.1347	-.0682	-.0194	-.0465
90.000		.7404	.3266	-.1352	-.4434	-.4999	-.2430	-.0299	.5556		-.5181	-.1097	-.1315	-.0879	-.0719
120.000			.3141	-.1566	-.4512	-.5068	-.1893	-.0880	.1995	-.1109	-.2872	-.1178	-.1178	-.1559	-.1138
135.000								-.1125		.1247		-.2600		-.1724	
150.000			.3385	-.1341	-.4421	-.4965	-.1435	-.0966	.0359	.1889	-.1163	-.4907	-.2171	-.2981	-.1808
165.000				-.1106	-.4256	-.4844	-.1291	-.0908	.0776	.2054	.0939	-.5479	-.1267	-.1761	-.1481
180.000	1.1200	.7531	.4140	-.0771	-.4032	-.4630	-.3301	-.0644	.0690	.2057	.1898	-.3652	-.1365	-.2278	-.1686
270.000		1.1230							.5016						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0664	.0538	-.0830
30.000	-.0512	.0905	-.0600
60.000	-.0386	.1092	.0079
90.000	.0150	.1254	
120.000	.0377	.1136	.0949
135.000	.0226	.1173	.0472
150.000	.0072	.0611	-.0946
165.000	.0199	.0925	.2187
180.000	.0046	.0894	-.0422

ALPHAT(9) = 7.950 BETAT (1) = -8.160

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.0830	1.0570	.6964	.2017	-.1837	-.2623	-.3527	-.2779	.1085	.0324	-.0964	-.1159	-.1154	-.0778	.0013
30.000			.8064	.3068	-.0977	-.1799	-.2750	.1651	.2021	.0001	-.0687	-.0690	-.0353	-.0006	.0495
60.000			.8098	.3117	-.0910	-.1691	-.2835	.3106	.3961	-.1433	-.1300	-.0706	.0189	.0542	.0709
90.000		1.0740	.7081	.2153	-.1738	-.2530	-.2330	.3491	.4094		-.3695	-.2177	-.0106	.0453	.0448
120.000			.5480	.0643	-.2983	-.3716	-.3809	-.0061	-.0847	-.2017	-.3763	-.2430	.0701	.1264	.0808
135.000								-.1201		.0194		-.2813		.1039	
150.000			.4267	-.0539	-.3687	-.4565	-.5236	-.1893	-.1026	.2194	-.0269	-.2665	.0156	-.0165	.0020
165.000				-.1169	-.4376	-.5026	-.4984	-.3244	.0573	.2719	.1587	-.1916	-.0126	-.0449	.0078
180.000	1.0830	.7567	.3164	-.1513	-.4617	-.5166	-.5023	-.2308	.1263	.2999	.1804	-.3356	-.0868	-.0663	-.0194
270.000		.6977							.4283						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 OL+T12+S12N25+S711 EXTERNAL TANK (RB1T30)

ALPHAT(5) = 7.950 BETAT (1) = -8.180

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	-.0236	.0750	-.0334
30.000	.0907	.1424	.0098
60.000	.1002	.2114	.0812
90.000	.1347	.2080	
120.000	.2054	.2807	.3876
135.000	.2274	.3311	.4358
150.000	.1939	.2961	.3757
165.000	.2052	.2886	.4344
180.000	.1670	.2394	.1874

ALPHAT(5) = 8.000 BETAT (2) = -4.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1280	1.1150	.7571	.2331	-.1595	-.2384	-.3336	-.2774	.2217	.1339	-.0550	-.1089	-.0844	-.0349	.0460
30.000			.7660	.2620	-.1357	-.2182	-.3107	-.2099	.2670	.0884	-.1004	-.0612	-.0444	-.0114	.0502
60.000			.7144	.2138	-.1725	-.2485	-.3585	.1916	.4166	-.0873	-.1416	-.0334	-.0174	-.0043	.0298
90.000		.9848	.6036	.1130	-.2594	-.3341	-.3351	.3487	.4104		-.4446	-.1806	-.0444	-.0381	-.0081
120.000			.4775	-.0079	-.3527	-.4214	-.4637	.0218	.0302	-.1991	-.4514	-.2613	.0448	.0583	.0132
135.000								-.1987		.0052		-.3514		.0267	
150.000			.3934	-.0848	-.4131	-.4706	-.4595	-.2105	.0638	.2275	.0029	-.3572	-.0349	-.0662	-.0448
165.000				-.1209	-.4370	-.4947	-.4632	-.1693	.1035	.2729	.1420	-.2428	-.0502	-.0525	-.0104
180.000	1.1280	.7802	.3317	-.1424	-.4427	-.5017	-.1936	-.1266	.0701	.2630	.2089	-.4130	-.0716	-.0504	-.0279
270.000		.8032							.4455						

X/LT	.7480	.8530	.9280
PHI			
.000	.0202	.1285	.0155
30.000	.0432	.1527	.0123
60.000	.0592	.1664	.0530
90.000	.1036	.1587	
120.000	.1715	.2702	.3638
135.000	.1789	.3065	.3555
150.000	.1621	.2754	.3111
165.000	.1778	.2736	.3466
180.000	.1543	.2355	.1420

ARC11-716 IA14 OL+T12+S12N2S+AT11 EXTERNAL TANK (RB1T38)

ALPHAT(5) = 8.020 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1480	1.1290	.7448	.2386	-.1511	-.2334	-.3292	-.2720	.2628	.1592	-.0418	-.1098	-.0421	.0090	.0498
30.000			.7062	.2029	-.1842	-.2652	-.3543	-.2970	.2904	.1325	-.1098	-.1000	-.0484	.0088	.0464
60.000			.6118	.1130	-.2539	-.3274	-.4301	.0472	.4318	-.0374	-.1593	-.0456	-.0201	.0037	.0149
90.000		.8994	.9010	.0107	-.3375	-.4077	-.4220	.1964	.4284		-.4266	-.0863	-.0561	-.0731	-.0215
120.000			.4079	-.0744	-.4030	-.4634	-.4860	-.0582	.1004	-.1721	-.4832	-.1970	-.0051	-.0105	-.0146
135.000								-.1136		.0456		-.3148		-.0309	
150.000			.3651	-.1122	-.4243	-.4841	-.4674	-.1125	.1000	.2443	-.0590	-.3685	-.0732	-.1153	-.0736
165.000				-.1319	-.4357	-.4911	-.2389	-.1115	.0691	.2795	.1580	-.2517	-.0579	-.0589	-.0161
180.000	1.1480	.7612	.3401	-.1423	-.4380	-.4965	-.2405	-.1107	.0676	.2777	.2318	-.4605	-.0653	-.0476	-.0057
270.000		.9065							.4312						

X/LT	.7480	.8530	.9280
PHI			
.000	.0307	.1371	.0344
30.000	.0300	.1494	.0048
60.000	.0229	.1489	.0168
90.000	.0793	.1206	
120.000	.1373	.2080	.1890
135.000	.1218	.2166	.1621
150.000	.1146	.1952	.1068
165.000	.1394	.2154	.1804
180.000	.1415	.2123	.0263

ALPHAT(5) = 8.000 BETAT (4) = 4.130

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1300	1.1080	.7274	.2279	-.1610	-.2421	-.3368	-.2797	.2225	.1308	-.0561	-.1092	-.0947	-.0459	.0472
30.000			.6274	.1317	-.2415	-.3195	-.4041	-.3301	.2937	.1287	-.1171	-.1642	-.1283	-.0347	.0388
60.000			.5034	.0151	-.3329	-.4015	-.4850	-.1164	.4455	.0064	-.1723	-.1492	-.0707	.0147	.0349
90.000		.8040	.4008	-.0810	-.4098	-.4682	-.4572	.0896	.4421		-.4357	-.1574	-.0084	-.0200	-.0227
120.000			.3388	-.1274	-.4408	-.4752	-.4267	-.1070	.1531	-.0840	-.4074	-.1949	-.0329	-.0364	-.0344
135.000								-.0873		.1133		-.3414		-.0585	
150.000			.3240	-.1547	-.4483	-.5029	-.2716	-.1430	.1381	.2508	-.0696	-.4282	-.1376	-.1480	-.0886
165.000				-.1491	-.4444	-.5011	-.1933	-.1338	.1109	.2627	.1383	-.3709	-.0874	-.0532	-.0267
180.000	1.1300	.7639	.3386	-.1367	-.4424	-.4996	-.3947	-.1086	.1099	.2483	.2305	-.4403	-.0786	-.0659	-.0391
270.000		1.0020							.4264						

X/LT	.7480	.8530	.9280
PHI			

ARC11-716 IA14 4+T12+S12RE5+AT11 EXTERNAL TANK (RB1T38)

ALPHAT(5) = 8.000 BETAT (4) = 4.130

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	.0157	.1278	.0149
30.000	-.0028	.1304	.0139
60.000	.0196	.1531	.0705
90.000	.0675	.1473	
120.000	.1062	.1448	.0611
135.000	.0973	.1537	.0913
150.000	.0842	.1090	-.0546
165.000	.1098	.1564	.1616
180.000	.1184	.1653	-.0125

ALPHAT(5) = 7.960 BETAT (5) = 8.300

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0790	1.0580	.6986	.2102	-.1769	-.2543	-.3515	-.2375	.1005	.0373	-.0764	-.1384	-.1329	-.0959	.0087
30.000			.5328	.0501	-.3066	-.3809	-.4592	-.4063	.1748	.1092	-.1225	-.1880	-.1838	-.0970	-.0135
60.000			.3654	-.0913	-.4136	-.4701	-.4528	-.1233	.3292	.0436	-.1686	-.1761	-.1280	.0068	.0108
90.000		.6837	.2961	-.1622	-.4623	-.4417	-.3485	-.0705	.4630		-.4624	-.1484	-.0475	-.0442	-.0920
120.000			.2601	-.1964	-.4701	-.4654	-.3260	-.0836	.1349	-.0669	-.3858	-.1345	-.0996	-.0886	-.0688
135.000								-.1280		.1100		-.2778		-.1025	
150.000			.2665	-.1999	-.4778	-.5242	-.1822	-.1340	.0704	.2039	-.1001	-.4296	-.1532	-.1815	-.0998
165.000				- 1823	-.4695	-.5286	-.1680	-.1419	.0583	.1983	.0892	-.4839	-.1023	-.1135	-.0894
180.000	1.0790	.6415	.3146	-.1627	-.4623	-.5193	-.1992	-.1165	.0589	.1673	.1543	-.3922	-.1144	-.1429	-.0936
270.000		1.0820							.4255						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0263	.0849	-.0200
30.000	-.0518	.0925	-.0161
60.000	-.0049	.1516	.0774
90.000	.0194	.1591	
120.000	.0790	.1443	.0769
135.000	.0710	.1471	.0469
150.000	.0480	.0932	-.0633
165.000	.0694	.1806	.2151
180.000	.0513	.1130	-.0211

ARC11-716 IA14 OA+T12+S12N25+AT11 EXTERNAL TANK (RB1T39) (14 FEB 74)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES
LREF = 58.7090 INCHES YMRP = .0000 INCHES
BREF = 58.7090 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 1.150 ELEVON = .000
RUDDER = .000 SPOBRK = .000

ALPHAT(1) = -8.670 BETAT (1) = -8.150

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1280	.7530	.3661	-.0703	-.3623	-.4200	-.4592	-.3276	.0516	.0802	-.1453	-.2637	-.0991	-.0317	-.0186
30.000			.4557	-.0030	-.3106	-.3748	-.4405	-.3588	-.1297	-.2037	-.3598	-.1636	-.1463	-.1203	-.0440
60.000			.5975	.1296	-.2056	-.2757	-.3650	-.0059	-.0165	-.4959	-.5940	-.3887	-.1213	.0340	-.0049
90.000		1.1270	.7570	.2819	-.0848	-.1627	-.2506	.4011	.4942		-.3878	-.3597	-.1971	-.0677	-.0094
120.000			.8623	.3827	-.0043	-.0830	-.1772	.1556	.5211	.1007	.3441	.2458	.1308	.0322	-.0567
135.000								-.0787		.3337		.1939		.0369	
150.000			.8814	.3965	.0068	-.0719	-.1857	-.0919	.4023	.5174	.4145	.1159	-.0049	-.0885	-.1232
165.000				.3532	-.0266	-.1040	-.2012	-.1512	.3508	.5338	.4576	.0780	.0216	-.0997	-.1694
180.000	1.1280	1.1880	.7801	.2994	-.0681	-.1442	-.2232	-.1852	.3051	.5250	.4121	-.0316	-.0396	-.1667	-.1794
270.000		.7589							.5651						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0489	.0201	-.0282
30.000	-.0743	-.0007	.0216
60.000	-.0232	.0261	.0751
90.000	.0060	-.0224	
120.000	-.0019	.0094	.3857
135.000	.0429	.1400	.3521
150.000	.0239	.1599	.2055
165.000	.0343	.1545	.4919
180.000	.0109	.1336	.2518

ALPHAT(1) = -8.640 BETAT (2) = -4.070

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1710	.7900	.3939	-.0938	-.3503	-.4273	-.4440	-.3645	.0591	.0778	-.1189	-.3019	-.0498	.0070	.0207
30.000			.4396	-.0353	-.3222	-.3876	-.4388	-.3795	.0628	-.1225	-.3042	-.2005	-.1381	-.0447	-.0214
60.000			.5336	.0452	-.2633	-.3478	-.4100	-.0466	-.0110	-.4894	-.5653	-.3170	-.1753	.0443	.0264
90.000		1.0443	.6374	.1686	-.1690	-.2601	-.3278	.2538	.4656		-.3787	-.3858	-.1083	-.0874	-.0207
120.000			.7526	.2772	-.0805	-.1776	-.2496	.1646	.5412	.1696	.2734	.1530	.0206	-.0309	-.1543
135.000								-.0606		.3804		.1333		-.0453	
150.000			.8138	.3269	-.0398	-.1325	-.2314	-.1699	.4018	.5177	.2744	-.0005	-.0606	-.1506	-.2085

ARC11-716 IA14 OL+T12+S12N25+AT11 EXTERNAL TANK (RB1T39)

ALPHAT(1) = -8.640 BETAT (2) = -4.070

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.040	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
169.000				.3375	-.0341	-.1350	-.2179	-.1871	.3690	.5372	.4115	-.0179	-.0442	-.1006	-.1039
180.000	1.1710	1.2000	.7857	.3112	-.0551	-.1497	-.2241	-.1262	.3175	.5393	.4556	-.0463	-.0993	-.1295	-.2101
270.000		.8533							.4759						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0094	.0591	-.0443
30.000	-.0208	.0457	.0141
60.000	.0394	.0770	.0847
90.000	.0634	.1034	
120.000	.1021	.0059	.3160
135.000	.0901	.1178	.2617
150.000	-.0242	.1329	.1363
165.000	-.0018	.1285	.3693
180.000	-.0165	.1136	.1797

ALPHAT(1) = -8.620 BETAT (3) = -.010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1660	.8049	.3972	-.0554	-.3431	-.3933	-.4523	-.3893	.0216	.0961	-.0812	-.2961	-.1312	.0119	.0245
30.000			.4118	-.0454	-.3372	-.3901	-.4513	-.3851	.0785	-.0238	-.2163	-.2247	-.1416	-.0489	-.0171
60.000			.4644	.0017	-.3073	-.3637	-.4344	-.0973	.0097	-.4196	-.5588	-.2426	-.2333	-.0767	.0024
90.000		.9552	.5569	.0837	-.2471	-.3084	-.3923	.0401	.4898		-.3839	-.4130	-.0910	-.0779	-.0970
120.000			.6717	.1954	-.1636	-.2332	-.3195	.1301	.4432	.2511	.2357	.0882	-.0439	-.0759	-.2075
135.000								-.1402		.3969		.0575		-.1279	
150.000			.7646	.2705	-.1004	-.1700	-.2760	-.2019	.4266	.5170	.1912	-.1282	-.0935	-.2642	-.2782
165.000				.3078	-.0648	-.1456	-.2404	-.1802	.3982	.5624	.3617	-.0629	-.0200	-.1703	-.1957
180.000	1.1960	1.2010	.8131	.3155	-.0648	-.1367	-.2332	-.1222	.3156	.5440	.4424	-.0540	.0161	-.1583	-.1942
270.000		.9489							.4784						

X/LT	.7480	.8550	.9280
PHI			
.000	-.0005	.0840	-.0384
30.000	-.0120	.0755	.0086
60.000	.0291	.0984	.1765
90.000	.0079	.1069	
120.000	.0184	.0730	.1444
135.000	-.0140	.1119	.1038
150.000	-.0079	.0720	.0848

ARC11-716 IA14 01+T12+S12N25+AT11 EXTERNAL TANK (RB1T39)

ALPHAT(1) = -8.620 BETAT (3) = -.010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
165.000	.0060	.1111	.2539
180.000	.0083	.1143	.1574

ALPHAT(1) = -8.640 BETAT (4) = 4.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1720	.7903	.3883	-.0630	-.3472	-.3964	-.4608	-.4031	.0197	.0929	-.0840	-.2983	-.1267	.0106	.0153
30.000			.3821	-.0710	-.3522	-.4013	-.4583	-.3009	.0231	.0409	-.1826	-.2499	-.0901	-.0094	-.0171
60.000			.3960	-.0577	-.3428	-.3944	-.3993	-.1084	-.0041	-.3088	-.5263	-.1909	-.1417	-.0858	-.0126
90.000		.8581	.4580	-.0028	-.3102	-.3685	-.1730	-.0548	.4480		-.3636	-.4363	-.0924	-.0814	-.0875
120.000			.5628	.0916	-.2384	-.3037	-.3668	.0593	.2995	.3065	.1823	.0434	-.0548	-.1278	-.2070
135.000								.0386		.3967		-.0159		-.1891	
150.000			.6775	.1963	-.1583	-.2270	-.3325	-.1731	.3274	.4402	.1045	-.2509	-.1561	-.3521	-.2757
165.000				.2672	-.0986	-.1749	-.2674	-.2002	.3118	.4907	.3486	-.1547	-.0375	-.1158	-.1952
180.000	1.1720	1.1980	.8041	.3111	-.0643	-.1411	-.2346	-.0698	.2769	.4872	.4464	-.0814	-.0096	-.1690	-.2085
270.000		1.0450							.4681						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0343	.0580	-.0276
30.000	-.0385	.0695	-.0293
60.000	-.0153	.0872	.1380
90.000	-.0462	.0409	
120.000	-.0325	.0274	.0339
135.000	-.0502	.0369	-.0126
150.000	-.0609	.0010	-.1011
165.000	-.0378	.0571	.1395
180.000	-.0391	.0760	-.0074

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T39)

ALPHAT(1) = -8.670 BETAT (5) = 8.210

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1220	.7407	.3599	-.0777	-.3646	-.4166	-.4761	-.1784	-.0020	.0532	-.1339	-.2534	-.1236	-.0460	-.0228
30.000			.3255	-.1113	-.3771	-.4250	-.4741	-.1113	.0052	.0641	-.1726	-.2411	-.0800	-.0331	-.0288
60.000			.3252	-.1103	-.3773	-.4063	-.1106	-.0934	-.1029	-.0947	-.4450	-.1630	-.0988	-.0790	-.0482
90.000		.7530	.3657	-.0750	-.3638	-.3153	-.0662	-.1353	.3351		-.3510	-.4264	-.1395	-.1073	-.1233
120.000			.4552	.0039	-.3051	-.3674	-.0270	-.0237	.2625	.3001	.2052	.0030	-.0863	-.1853	-.2496
135.000								-.0324		.3915		-.0872		-.2478	
150.000			.5871	.1170	-.2205	-.2861	-.3859	-.0693	.2628	.3644	.1153	-.3892	-.2522	-.4187	-.2998
165.000				.2221	-.1386	-.2084	-.3041	-.1907	.2593	.4110	.3152	-.2705	-.0182	-.1613	-.2751
180.000	1.1220	1.1160	.7804	.2926	-.0791	-.1534	-.2465	-.0346	.2608	.4244	.4311	-.0781	-.0321	-.2498	-.2868
270.000		1.1240							.4796						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0525	.0014	-.0351
30.000	-.0376	.0315	-.0493
60.000	-.0212	.0446	.0962
90.000	-.1256	-.0739	
120.000	-.1026	-.0179	.0127
135.000	-.1266	-.0008	-.0111
150.000	-.1358	-.0427	-.1551
165.000	-.1133	-.0089	.1270
180.000	-.1188	-.0024	-.0349

ALPHAT(2) = -4.490 BETAT (1) = -8.160

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1810	.8563	.4646	.0029	-.3085	-.3669	-.4311	-.3754	.0845	.0742	-.1422	-.2185	-.1441	-.0271	-.0100
30.000			.5661	.0877	-.2371	-.3079	-.3815	-.3274	-.0263	-.1322	-.3123	-.1235	-.1302	-.1038	-.0217
60.000			.6866	.2006	-.1507	-.2188	-.3069	-.0806	.1433	-.3493	-.5038	-.2855	-.1227	.0575	.0287
90.000		1.1730	.7870	.2993	-.0734	-.1479	-.2424	.3260	.5548		-.5904	-.3358	-.1189	-.0256	-.0035
120.000			.8225	.3361	-.0453	-.1225	-.2161	.1291	.4182	-.0351	.2598	.2411	.1338	.0379	-.0545
135.000								-.1368		.1972		.1762		.0386	
150.000			.7952	.3048	-.0697	-.1435	-.2444	-.1605	.2988	.4180	.2969	.0792	-.0164	-.0905	-.1142
165.000				.2498	-.1164	-.1869	-.2781	-.2261	.2709	.4645	.3930	.0482	.0028	-.1050	-.1556
180.000	1.1810	1.1070	.6814	.1950	-.1522	-.2213	-.3011	-.2613	.2286	.4797	.3612	-.0745	-.0430	-.1737	-.1756
270.000		.8035							.5169						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T39)

ALPHAT(2) = -4.490 BETAT (1) = -8.160

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0618	.0037	-.0211
30.000	-.0415	.0092	.0058
60.000	.0210	.1132	.1098
90.000	.0579	.1212	
120.000	.0736	.1396	.4193
135.000	.0813	.2337	.4272
150.000	.0791	.2407	.3643
165.000	.0834	.2333	.4845
180.000	.0552	.1930	.2542

ALPHAT(2) = -4.470 BETAT (2) = -4.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2270	.8986	.4925	.0211	-.2895	-.34 1	-.4134	-.3710	.0810	.1255	-.0923	-.2529	-.1818	.0002	.0903
30.000			.5400	.0625	-.2548	-.3205	-.3913	-.3433	.0507	-.0332	-.2264	-.1999	-.1213	-.0891	-.0161
60.000			.6131	.1239	-.2064	-.2694	-.3545	-.2622	.1526	-.3217	-.5123	-.2099	-.2170	-.0264	.0160
90.000		1.0940	.6890	.2000	-.1519	-.2220	-.3101	.1771	.5498		-.5460	-.3776	-.0984	-.0547	-.0537
120.000			.7381	.2475	-.1162	-.1895	-.2767	-.1783	.4367	.0276	.2026	.1485	.0315	-.0166	-.1347
135.000								-.2256		.2596		.1082		-.0243	
150.000			.7507	.2550	-.1098	-.1814	-.2859	-.2177	.3195	.4479	.1559	.0155	-.0620	-.1402	-.1723
165.000				.2375	-.1233	-.1954	-.2882	-.2411	.2728	.4749	.3556	-.0522	-.0406	-.1599	-.1548
180.000	1.2270	1.1230	.7039	.2101	-.1410	-.2136	-.2949	-.2097	.2151	.4535	.3810	-.0812	-.0252	-.1226	-.1815
270.000		.9075							.5776						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0122	.0459	-.0170
30.000	-.0055	.0607	.0351
60.000	.0228	.1230	.1137
90.000	.0181	.1635	
120.000	.0268	.0746	.3433
135.000	.0271	.1729	.3289
150.000	.0191	.1766	.2492
165.000	.0362	.1929	.3673
180.000	.0210	.1651	.2003

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T39)

ALPHAT(2) = -4.460 BETAT (3) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2430	.9111	.4955	.0162	-.2871	-.3411	-.4121	-.3648	.0898	.1369	-.0698	-. 491	-.1864	.0041	.0525
30.000			.5035	.0286	-.2812	-.3421	-.4079	-.3593	.1008	.0559	-.1677	-.2905	-.1242	-.0381	-.0101
60.000			.5363	.0602	-.2627	-.3226	-.3843	-.2875	.1961	-.2686	-.4876	-.1582	-.1187	-.1353	-.0076
90.000		1.0050	.5900	.1031	-.2281	-.2920	-.3711	.0304	.5510		-.5450	-.4134	-.0905	-.0759	-.0802
120.000			.6453	.1547	-.1877	-.2560	-.3383	-.0719	.4265	.0988	.1 30	.0794	-.0481	-.0668	-.1914
135.000								-.2620		.3180		.0313		-.1048	
150.000			.6903	.1960	-.1578	-.2249	-.3290	-.2637	.2704	.3938	.1177	-.1302	-.0927	-.2398	-.2642
165.000				.2138	-.1410	-.2148	-.3048	-.2570	.2782	.4256	.3038	-.1148	-.0222	-.1522	-.1939
180.000	1.2430	1.1260	.7153	.2163	-.1417	-.2099	-.2995	-.1714	.2059	.4161	.3959	-.1105	.0050	-.1228	-.1701
270.000		1.0060							. 33						

X/LT	.7460	.8530	.9280
PHI			
.000	.0005	.0907	-.0053
30.000	-.0077	.0818	.0082
60.000	.0314	.1194	.1344
90.000	.0232	.1468	
120.000	.0404	.0967	.1842
135.000	.0252	.1465	.1486
150.000	.0130	.1166	.0405
165.000	.0305	.1493	.2504
180.000	.0300	.1513	.1451

ALPHAT(2) = -4.460 BETAT (4) = 4.170

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2230	.8918	.4835	.0186	-.2947	-.3506	-.4185	-.3776	.0764	.1234	-.0803	-.2582	-.1752	.0274	.0367
30.000			.4566	-.0095	-.3102	-.3679	-.4277	-.3836	.0851	.0952	-.1418	-.3198	-.1013	.0224	.0374
60.000			.4544	-.0072	-.3105	-.3655	-.4021	-.2249	.2423	-.2068	-.4447	-.1391	-.0619	-.0627	-.0360
90.000		.9010	.4837	.0211	-.2962	-.3524	-.3921	-.0123	.5835		-.5034	-.4556	-.0841	-.0804	-.0575
120.000			.5391	.0651	-.2576	-.3200	-.3979	.0489	.1429	.2144	.1151	.0167	-.0614	-.1123	-.1827
135.000								.0579		.2374		-.0497		-.1706	
150.000			.6120	.1233	-.2117	-.2751	-.3768	.0439	.1967	.3254	.0218	-.2855	-.1664	-.3269	-.2606
165.000				.1747	-.1729	-.2410	-.3334	-.2747	.2259	.3809	.2928	-.2151	-.0465	-.1224	-.1814
180.000	1.2230	1.1220	.7052	.2080	-.1480	-.2156	-.3079	-.1532	.2089	.3729	.3941	-.1358	-.0111	-.1716	-.1890
270.000		1.0980							.5392						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T39)

ALPHAT(2) = -4.480 BETAT (4) = 4.170

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0283	.0373	-.0144
30.000	-.0223	.0530	-.0114
60.000	-.0283	.0734	.0995
90.000	-.0191	.0771	
120.000	-.0086	.0505	.0546
135.000	-.0275	.0624	.0103
150.000	-.0348	.0290	-.0846
165.000	-.0098	.0843	.1458
180.000	-.0086	.1055	.0048

ALPHAT(2) = -4.480 BETAT (5) = 8.160

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1710	.8431	.4565	-.0062	-.3091	-.3705	-.4383	-.4002	.0489	.0878	-.1231	-.2138	-.1748	-.0461	-.0182
30.000			.3948	-.0556	-.3404	-.3964	-.4563	-.3528	.0504	.1052	-.1415	-.2716	-.1088	-.0262	.0077
60.000			.3782	-.0721	-.3458	-.3996	-.4460	-.1246	.2020	-.1282	-.4083	-.1478	-.0645	-.0356	-.0227
90.000		.8022	.3908	-.0583	-.3446	-.3972	-.0654	-.0481	.4615		-.3954	-.4239	-.1637	-.1083	-.0983
120.000			.4438	-.0121	-.3162	-.3737	-.0269	-.0142	.0561	.2339	.0966	-.0250	-.1005	-.1860	-.2199
135.000								.0045		.3108		-.1078		-.2392	
150.000			.5277	.0544	-.2621	-.3262	-.3298	-.0002	.1550	.2981	.0650	-.3987	-.2367	-.4041	-.2653
165.000				.1319	-.2081	-.2747	-.3615	-.0736	.1709	.3332	.2497	-.3413	-.0436	-.1572	-.2620
180.000	1.1710	1.0150	.6765	.1891	-.1611	-.2336	-.3195	-.1231	.1971	.3356	.3653	-.1267	-.0466	-.2562	-.2816
270.000		1.1690							.5473						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0674	-.0081	-.0339
30.000	-.0491	.0379	-.0287
60.000	-.0533	.0457	.0711
90.000	-.0998	.0071	
120.000	-.0672	.0235	.0485
135.000	-.0852	.0429	.0159
150.000	-.0872	.0024	-.1310
165.000	-.0809	.0256	.1704
180.000	-.0807	.0318	-.0207

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T39)

ALPHAT(3) = -.530 BETAT (1) = -4.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2470	.9931	.5879	.0977	-.2333	-.2946	-.3708	-.3285	.1431	.1499	-.0597	-.2022	-.1919	-.0349	.0491
30.000			.6370	.1423	-.1962	-.2637	-.3412	-.2988	.1016	.0348	-.2092	-.1632	-.0992	-.0814	-.0066
60.000			.6811	.1859	-.1627	-.2307	-.3165	-.2478	.2849	-.2020	-.3613	-.1388	-.0794	-.1098	.0068
90.000		1.1160	.7080	.2129	-.1464	-.2169	-.2920	.0587	.5787		-.5052	-.4704	-.2572	-.0988	-.0382
120.000			.6936	.2030	-.1526	-.2233	-.3068	-.2197	.3511	-.1103	-.1175	.0773	.0830	.0257	-.0712
135.000								-.2479		.1188		-.0593		.0233	
150.000			.6671	.1723	-.1743	-.2430	-.3337	-.2599	.2690	.3532	.1256	-.0958	-.0588	-.1058	-.1150
165.000				.1367	-.2012	-.2642	-.3485	-.3004	.1956	.4006	.2759	-.0593	-.0237	-.1349	-.0965
180.000	1.2470	1.0380	.6074	.1097	-.2167	-.2815	-.3560	-.2180	.1392	.3537	.3221	-.1132	.0009	-.0705	-.1013
270.000		.9245							.6217						

X/LT	.7460	.8530	.9280
PHI			
.000	.0181	.0411	-.0029
30.000	.0216	.0764	.0267
60.000	.0621	.1550	.1035
90.000	.0579	.1853	
120.000	.0382	.1915	.3973
135.000	.0494	.2609	.4021
150.000	.0602	.2609	.3586
165.000	.0779	.2671	.3779
180.000	.0640	.2300	.2106

ALPHAT(3) = -.520 BETAT (2) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2610	1.0100	.5936	.1086	-.2256	-.2873	-.3633	-.3235	.1350	.1629	-.0341	-.1975	-.2035	-.0297	.0274
30.000			.5966	.1056	-.2239	-.2905	-.3628	-.3230	.1165	.1181	-.1441	-.2287	-.1104	-.0369	.0147
60.000			.5983	.1086	-.2236	-.2844	-.3748	-.2652	.3103	-.1509	-.3291	-.1453	-.0396	-.0570	-.0342
90.000		1.0280	.6056	.1181	-.2204	-.2836	-.3417	-.0945	.5946		-.5266	-.4753	-.1729	-.1295	-.0693
120.000			.6103	.1223	-.2162	-.2819	-.3598	-.2515	.3836	-.0379	-.0834	.0110	-.0167	-.0230	-.1330
135.000								-.3075		.2060		-.1334		-.0437	
150.000			.6180	.1200	-.2142	-.2770	-.3713	-.3035	.1998	.3785	.0278	-.2050	-.0875	-.1481	-.2065
165.000				.1201	-.2105	-.2765	-.3605	-.3102	.1973	.3419	.2744	-.1483	-.0461	-.1054	-.1460
180.000	1.2610	1.0380	.6165	.1209	-.2110	-.2765	-.3600	-.1404	.1477	.3294	.3439	-.1801	-.0327	-.0954	-.1417
270.000		1.0220							.5988						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T39)

ALPHAT(3) = -.520 BETAT (2) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0339	.0681	.0223
30.000	.0362	.0983	.0278
60.000	.0277	.1274	.0833
90.000	.0603	.1588	
120.000	.0810	.1451	.2625
135.000	.0806	.1989	.2124
150.000	.0417	.1790	.146"
165.000	.0614	.2025	.2299
180.000	.0744	.2007	.1313

ALPHAT(3) = -.530 BETAT (3) = 4.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2450	.9897	.5819	.0952	-.2305	-.2959	-.3686	-.3286	.1069	.1579	-.0490	-.1994	-.2017	-.0372	.0457
30.000			.5336	.0597	-.2619	-.3242	-.3913	-.3366	.1870	.1450	-.1154	-.2594	-.1331	.0141	.0355
60.000			.5078	.0275	-.2757	-.3326	-.4156	-.1658	.2665	-.0820	-.3010	-.1609	-.0534	-.0021	.0060
90.000		.9267	.5010	.0235	-.2799	-.3413	-.3416	-.0728	.6082		-.5356	-.3389	-.1243	-.1028	-.0476
120.000			.5159	.0505	-.2740	-.3356	-.4056	-.0432	.3039	.0413	-.0623	-.0077	-.0765	-.0555	-.1293
135.000								-.0527		.2570		-.1534		-.1048	
150.000			.5556	.0711	-.2564	-.3134	-.4051	-.0345	.1326	.2789	.0217	-.3659	-.1616	-.2380	-.2121
165.000				.0948	-.2323	-.2996	-.3786	-.2985	.1801	.3054	.2424	-.2463	-.0802	-.1015	-.1222
180.000	1.2450	1.0400	.6104	.1172	-.2167	-.2835	-.3619	-.2005	.1458	.3153	.3472	-.1838	-.0091	-.1401	-.1406
270.000		1.1140							.5819						

X/LT	.7460	.8530	.9280
PHI			
.000	.0141	.0326	.0056
30.000	.0116	.0550	.0120
60.000	.0049	.0866	.0638
90.000	.0316	.1060	
120.000	.0378	.1010	.0917
135.000	.0149	.1132	.0491
150.000	.0107	.0759	-.0460
165.000	.0304	.1313	.1781
180.000	.0333	.1522	.0287

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T39)

ALPHAT(3) = -.540 BETAT (4) = 8.200

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1950	.9405	.5490	.0728	-.2493	-.3120	-.3887	-.3504	.0693	.0919	-.0958	-.1603	-.1847	-.1057	-.0354
30.000			.4621	.0035	-.3013	-.3663	-.4304	-.3827	.0945	.1200	-.1159	-.2585	-.1405	-.0367	-.0100
60.000			.4206	-.0465	-.3304	-.3818	-.4557	-.0439	.2117	-.0424	-.2356	-.1598	-.0868	-.0352	-.0192
90.000		.8193	.4043	-.0472	-.3353	-.3900	-.4367	.0022	.6184		-.4564	-.0255	-.0470	-.0601	-.0863
120.000			.4222	-.0328	-.3277	-.3823	-.3849	-.0605	.0707	.1292	-.0307	-.0369	-.0858	-.1372	-.1791
135.000								-.0325		.1708		-.1379		-.1720	
150.000			.4756	.0084	-.3003	-.3577	-.4219	-.0121	.1056	.1665	-.0017	-.4018	-.1755	-.3219	-.2208
165.000				.0520	-.2655	-.3293	-.4094	-.0106	.1481	.2583	.1939	-.3764	-.0457	-.1545	-.2072
180.000	1.1950	.9288	.5813	.0976	-.2313	-.2985	-.3774	-.0835	.1524	.2611	.2954	-.1809	-.0450	-.2214	-.2165
270.000		1.1960							.5914						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0375	-.0009	-.0373
30.000	-.0255	.0349	-.0154
60.000	-.0330	.0551	.1088
90.000	-.0726	.0780	
120.000	-.0235	.0735	.1016
135.000	-.0410	.0894	.0655
150.000	-.0539	.0566	-.0943
165.000	-.0397	.0705	.2235
180.000	-.0402	.0817	-.0066

ALPHAT(4) = 3.950 BETAT (1) = -8.200

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1910	1.0390	.6619	.1786	-.1735	-.2424	-.3213	-.2838	.0105	.1076	-.0519	-.1153	-.1231	-.0781	-.0229
30.000			.7701	.2808	-.0909	-.1640	-.2525	-.2118	.1528	.0197	-.1438	-.0816	-.0456	-.0421	-.0112
60.000			.8217	.3279	-.0509	-.1243	-.2243	-.0129	.3801	-.1321	-.1994	-.1017	.0266	.0299	.0244
90.000		1.1800	.7930	.3051	-.0704	-.1472	-.2010	.3683	.5526		-.3710	-.2382	-.1391	-.2094	-.0861
120.000			.6955	.2138	-.1442	-.2145	-.3018	-.0514	.1615	-.3121	-.4176	-.2463	.1923	.1753	.0838
135.000								-.2314		-.1757		-.1700		.1380	
150.000			.6005	.1138	-.2184	-.2826	-.3718	-.3123	.0267	.1831	.1399	-.1871	.0179	.0018	-.0053
165.000				.0537	-.2697	-.3336	-.4090	-.3401	.1395	.3351	.2474	-.0607	-.1643	-.0440	-.0078
180.000	1.1910	.9224	.4817	.0140	-.2963	-.3541	-.4065	-.3226	.1375	.3475	.2316	-.1596	-.1066	-.0057	-.0553
270.000		.8083							.6569						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T39)

ALPHAT(4) = 3.990 BETAT (1) = -8.200

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0022	.0027	-.0489
30.000	.0448	.0913	-.0130
60.000	.0761	.1797	.0939
90.000	.0734	.0378	
120.000	.1636	.3138	.5679
135.000	.1770	.3832	.5438
150.000	.1615	.3441	.4985
165.000	.1762	.3345	.5107
180.000	.1391	.2746	.2669

ALPHAT(4) = 3.980 BETAT (2) = -4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2400	1.0910	.6949	.1988	-.1503	-.2179	-.3031	-.2673	.0558	.1976	-.0021	-.1340	-.1440	-.0804	.0188
30.000			.7355	.2393	-.1204	-.1924	-.2741	-.2371	.1995	.1104	-.1038	-.1209	-.0862	-.0443	-.0048
60.000			.7362	.2418	-.1184	-.1865	-.2655	-.1883	.3872	-.0830	-.1943	-.1508	-.0003	-.0056	.0083
90.000		1.0980	.6972	.2067	-.1474	-.2179	-.3004	.0630	.5483		-.4314	-.2318	.0145	-.0528	-.0473
120.000			.6265	.1414	-.1972	-.2633	-.3443	-.2425	.2122	-.2419	-.3646	-.2765	.0754	.0948	-.0011
135.000								-.3072		-.0589		-.2632		.0799	
150.000			.5696	.0903	-.2378	-.2979	-.3859	-.3176	.1943	.2495	.1434	-.2592	-.1098	-.0262	-.0492
165.000				.0557	-.2682	-.3244	-.4018	-.3388	.1424	.3272	.2506	-.0843	-.1620	-.0398	-.0157
180.000	1.2400	.9361	.5058	.0330	-.2773	-.3360	-.4055	-.1376	.0881	.2662	.3054	-.1596	-.2372	-.0262	-.0342
270.000		.9175							.5979						

X/LT	.7460	.8530	.9280
PHI			
.000	.0471	.0472	.0655
30.000	.0466	.0953	.0591
60.000	.0557	.1640	.1121
90.000	.0523	.1632	
120.000	.0798	.2480	.4275
135.000	.1002	.3135	.4117
150.000	.1057	.2986	.3693
165.000	.1203	.3041	.3928
180.000	.1117	.2565	.2132

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T39)

ALPHAT(4) = 3.850 BETAT (3) = .020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2530	1.1020	.7013	.2000	-.1467	-.2209	-.3016	-.2597	.1344	.2079	.0087	-.1416	-.1321	-.0478	.0188
30.000			.6864	.1839	-.1590	-.2329	-.3108	-.2670	.1847	.1535	-.0889	-.1436	-.1076	-.0481	.0186
60.000			.6473	.1442	-.1854	-.2534	-.3420	-.1999	.3140	-.0253	-.1862	-.1265	-.0461	-.0252	-.0057
90.000		1.0120	.5956	.1113	-.2195	-.2888	-.3622	-.0672	.5660		-.4917	-.2133	-.0486	-.0843	-.0731
120.000			.5493	.0766	-.2498	-.3144	-.3782	-.3053	.2908	-.1747	-.3132	-.2373	.0172	.0310	-.0722
135.000								-.3327		.0762		-.3097		.0256	
150.000			.5280	.0545	-.2613	-.3282	-.4121	-.3305	.1622	.2919	.0723	-.2859	-.1194	-.0460	-.1238
165.000				.0376	-.2682	-.3322	-.4061	-.2818	.1135	.2589	.2714	-.1353	-.1159	-.0204	-.0747
180.000	1.2530	.9373	.5109	.0324	-.2734	-.3339	-.4036	-.1387	.1108	.2637	.3204	-.2331	-.0903	-.0120	-.0637
270.000		1.0120							.5715						

X/LT	.7460	.8530	.9280
PHI			
.000	.0438	.1022	.0638
30.000	.0480	.1159	.0670
60.000	.0445	.1501	.1257
90.000	.0629	.1663	
120.000	.1050	.2117	.2868
135.000	.1030	.2157	.2587
150.000	.0660	.2289	.2048
165.000	.0891	.2354	.2356
180.000	.1010	.2339	.1267

ALPHAT(4) = 3.950 BETAT (4) = 4.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2370	1.0840	.6640	.1944	-.1572	-.2264	-.3098	-.2678	.0386	.1986	-.0015	-.1362	-.1576	-.0599	.0430
30.000			.6138	.1260	-.2075	-.2733	-.3501	-.3092	.2529	.2053	-.0793	-.1802	-.1100	-.0599	.0428
60.000			.5467	.0582	-.2552	-.3138	-.3971	-.2803	.3509	.0343	-.2051	-.0587	-.0773	-.0326	.0094
90.000		.9156	.4972	.0311	-.2875	-.3471	-.4183	.0017	.6108		-.5037	-.1161	-.1228	-.0867	-.0359
120.000			.4722	.0023	-.3021	-.3580	-.4086	-.1833	.2651	-.0992	-.2413	-.0816	-.0493	-.0245	-.0679
135.000								-.0809		.1630		-.2386		-.0357	
150.000			.4767	.0016	-.3028	-.3582	-.4381	-.0598	.0834	.2815	.0182	-.3961	-.1429	-.1065	-.1440
165.000				.0172	-.2932	-.3538	-.4258	-.1177	.1130	.2908	.2091	-.2332	-.1120	-.0165	-.0540
180.000	1.2370	.9361	.5079	.0274	-.2845	-.3454	-.4171	-.1721	.0916	.2623	.3251	-.2406	-.0533	-.0357	-.0684
270.000		1.1030							.5634						

X/LT	.7460	.8530	.9230
PHI			

ARC11-716 IA14 O4+T12+S12N25+AT11 EXTERNAL TANK (RB1T39)

ALPHAT(4) = 3.950 BETAT (4) = 4.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0642	.0332	.0655
30.000	.0538	.0493	.0494
60.000	.0453	.0767	.0800
90.000	.0645	.1080	
120.000	.0764	.1456	.1063
135.000	.0635	.1523	.0715
150.000	.0630	.1172	-.0185
165.000	.0725	.1682	.1903
180.000	.0792	.1881	.0399

ALPHAT(4) = 3.980 BETAT (5) = 8.210

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1900	1.0400	.6598	.1805	-.1651	-.2365	-.3192	-.2847	.0318	.0980	-.0473	-.1120	-.1451	-.0754	-.0419
30.000			.5356	.0642	-.2569	-.3209	-.3906	-.3552	.1388	.1428	-.0733	-.1544	-.1093	-.0609	-.0156
60.000			.4447	-.0135	-.3148	-.3700	-.3806	-.2083	.2380	.0893	-.1456	-.0449	-.0930	-.0503	-.0355
90.000		.8080	.3970	-.0534	-.3401	-.3905	-.4471	-.0527	.6037		-.4348	-.0298	-.1070	-.0972	-.0645
120.000			.3847	-.0614	-.3450	-.3947	-.4565	-.0634	.1387	-.0191	-.2044	-.0638	-.0872	-.0934	-.1207
135.000								-.0773		.1874		-.2332		-.1127	
150.000			.4089	-.0507	-.3384	-.3847	-.4655	-.0646	.0326	.1869	.0224	-.4400	-.1725	-.2221	-.1775
165.000				-.0224	-.3171	-.3758	-.4491	-.0619	.0893	.2294	.1818	-.3692	-.0927	-.1227	-.1351
180.000	1.1900	.8250	.4820	.0089	-.2979	-.3584	-.4321	-.0485	.1153	.2190	.2625	-.2325	-.0561	-.1819	-.1541
270.000		1.1830							.5651						

X/LT	.7460	.8530	.9280
PHI			
.000	.0039	.0118	-.0254
30.000	.0273	.0366	.0167
60.000	.0149	.0696	.0794
90.000	.0288	.1060	
120.000	.0265	.1265	.1235
135.000	.0096	.1213	.0896
150.000	-.0040	.0832	-.0811
165.000	.0153	.0982	.2572
180.000	.0044	.1071	-.0003

ARC11-718 IA14 O8+T12+S12N25+AT11 EXTERNAL TANK (RB1T39)

ALPHAT(5) = 7.980 BETAT (1) = -8.210

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6330
PHI															
.000	1.1450	1.1130	.7545	.2727	-.0932	-.1670	-.2554	-.2136	.0487	.1333	-.0081	-.0443	-.0629	-.0595	-.0450
30.000			.8596	.3725	-.0084	-.0909	-.1828	-.1253	.2415	.0908	-.1024	-.0117	.0111	.0046	.0268
60.000			.8646	.3782	-.0037	-.0798	-.1897	.2126	.4612	-.0320	-.0977	-.0259	.0563	.0541	.0699
90.000		1.1310	.7649	.2886	-.0621	-.1589	-.2099	.4158	.4858		-.3362	-.1785	.0046	.0569	.0776
120.000			.6124	.1423	-.1976	-.2675	-.3480	.0663	.0051	-.1886	-.3171	-.2413	.0581	.1298	.1156
135.000								-.2520		-.1851		-.2352		.1286	
150.000			.4943	.0301	-.2852	-.3470	-.4335	-.3208	-.1108	.2087	.0498	-.2242	-.0330	.0144	.0365
165.000				-.0314	-.3312	-.3906	-.4550	-.3969	.0530	.3161	.2281	-.0737	-.1739	-.0090	.0332
180.000	1.1450	.8158	.3836	-.0600	-.3514	-.4039	-.4315	-.3770	.1082	.3310	.2594	-.1900	-.0932	-.0118	-.0033
270.000		.7594							.5114						

X/LT	.7460	.8530	.9280
PHI			
.000	.0454	.0295	.0100
30.000	.0999	.1273	.0617
60.000	.1340	.2162	.1307
90.000	.1546	.2063	
120.000	.1962	.2956	.4706
135.000	.2231	.3659	.5051
150.000	.1916	.3418	.4567
165.000	.1996	.3295	.5123
180.000	.1685	.2815	.2723

ALPHAT(5) = 8.010 BETAT (2) = -4.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6330
PHI															
.000	1.1930	1.1730	.7923	.2971	-.0734	-.1499	-.2417	-.1996	.1162	.2233	.0446	-.0582	-.0513	-.0481	.0061
30.000			.8218	.3271	-.0500	-.1305	-.2171	-.1754	.2531	.1708	-.0615	-.0208	-.0215	-.0203	.0101
60.000			.7742	.2835	-.0835	-.1566	-.2580	-.1198	.4470	.0133	-.1185	.0114	.0058	.0058	.0086
90.000		1.0530	.6668	.1863	-.1652	-.2358	-.3111	.1275	.4689		-.3864	-.1530	-.0059	.0076	-.0088
120.000			.5410	.0728	-.2533	-.3178	-.3902	-.2486	.0156	-.1251	-.3786	-.2375	.0331	.0891	.0509
135.000								-.3507		-.0517		-.3254		.0767	
150.000			.4668	.0035	-.3046	-.3630	-.4394	-.3686	.0985	.2534	.0573	-.3079	-.0993	-.0131	-.0056
165.000				-.0278	-.3297	-.3867	-.4277	-.3764	.1204	.2980	.2142	-.1086	-.1224	-.0076	.0317
180.000	1.1930	.8280	.4039	-.0562	-.3378	-.3918	-.4541	-.3843	.0493	.2712	.2943	-.2292	-.1276	.0056	.0026
270.000		.8661							.4932						

X/LT	.7460	.8530	.9280
PHI			

DATE 06 JAN 75 TABULATED PRESSURE DATA - IA14A - VOL. 5

ARC11-716 IA14 OI+T12+S12N25+AT11 EXTERNAL TANK (RB1T30)

ALPHAT(5) = 8.010 BETAT (2) = -4.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	.0806	.0754	.0861
30.000	.0982	.1303	.0777
60.000	.0907	.1862	.1077
90.000	.0990	.1618	
120.000	.1414	.2965	.4271
135.000	.1620	.3383	.4102
150.000	.1489	.3176	.3717
165.000	.1643	.3106	.3986
180.000	.1549	.2693	.2104

ALPHAT(5) = 8.080 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2080	1.1830	.7982	.3032	-.0713	-.1460	-.2389	-.1968	.0777	.2575	.0653	-.0778	-.0361	-.0087	.0153
30.000			.7612	.2702	-.1002	-.1764	-.2619	-.2211	.2532	.2301	-.0236	-.0667	-.0333	-.0214	.0145
60.000			.6731	.1859	-.1666	-.2340	-.3294	-.2288	.4543	.0618	-.1151	-.0215	-.0095	-.0015	.0148
90.000		.9626	.5673	.0896	-.2427	-.3076	-.3840	.0605	.4843		-.3790	-.0869	.0197	-.0084	-.0261
120.000			.4768	.0145	-.2998	-.3611	-.4206	-.2109	.1635	-.1904	-.4102	-.2083	.0022	.0300	.0016
135.000								-.2572		-.0383		-.3466		.0203	
150.000			.4359	-.0274	-.3267	-.3799	-.4038	-.2227	.1129	.2226	.0551	-.3489	-.1124	-.0431	-.0553
165.000				-.0429	-.3359	-.3883	-.4418	-.0515	.0160	.2308	.2410	-.1223	-.1132	.0020	.0038
180.000	1.2080	.8262	.4133	-.0446	-.3364	-.3898	-.4436	-.0561	.0391	.2226	.3023	-.3139	-.1265	.0053	.0136
270.000		.9649							.4913						

X/LT	.7480	.8530	.9280
PHI			
.000	.0915	.1291	.1136
30.000	.0557	.1385	.0887
60.000	.0694	.1515	.0817
90.000	.0874	.1390	
120.000	.1280	.2422	.2240
135.000	.1218	.2566	.2140
150.000	.1183	.2394	.1492
165.000	.1495	.2573	.2798
180.000	.1505	.2559	.1343

ARC.1-716 IA14 OH+T12+S12N25+AT11 EXTERNAL TANK (RB1739)

ALPHAT(9) = 8.000 BETAT (4) = 4.140

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.1950	1.1640	.7018	.2910	-.0746	-.1528	-.2426	-.1994	.0526	.2208	.0483	-.0646	-.0980	-.0423	.0036
30.000			.6839	.2000	-.1306	-.2217	-.3042	-.2656	.2788	.2365	-.0206	-.1101	-.0989	-.0798	.0328
60.000			.5686	.0899	-.2379	-.3022	-.3857	-.3020	.4567	.1122	-.0966	-.0965	-.0657	-.0276	.0490
90.000		.6881	.4672	.0068	-.3019	-.3640	-.4064	-.0878	.4910		-.3723	-.3056	.0180	.0151	.0091
120.000			.4082	-.0455	-.3556	-.3905	-.4224	-.1994	.1737	-.0314	-.3361	-.2085	-.0034	.0228	-.0037
135.000								-.1722		.1490		-.3333		.0136	
150.000			.3936	-.0603	-.3430	-.3965	-.4673	-.1000	.0864	.2755	.0368	-.3786	-.1483	-.0342	-.0756
165.000				-.0638	-.3425	-.3962	-.4616	-.0897	.0645	.2753	.2062	-.1941	-.1249	.0136	.0160
180.000	1.1950	.8279	.4077	-.0554	-.3400	-.3920	-.4591	-.0927	.0557	.2432	.3037	-.2847	-.1027	.0131	.0028
270.000		1.0610							.4876						

X/LT	.7480	.8530	.9280
PHI			
.000	.0561	.0724	.0813
30.000	.0389	.0583	.0565
60.000	.0443	.1043	.1537
90.000	.0847	.1607	
120.000	.1086	.1749	.1047
135.000	.1039	.1803	.0823
150.000	.0948	.1470	-.0050
165.000	.1112	.1932	.1853
180.000	.1217	.2049	.0311

ALPHAT(9) = 7.870 BETAT (5) = 8.290

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.1420	1.1160	.7572	.2813	-.0873	-.1637	-.2569	-.2157	.0340	.1280	.0023	-.0441	-.0789	-.0602	-.0336
30.000			.5937	.1257	-.2106	-.2816	-.3590	-.3265	.1678	.2059	-.0126	-.0978	-.1284	-.1048	-.0627
60.000			.4508	-.0071	-.3152	-.3979	-.4020	-.2255	.2852	.1616	-.0524	-.0976	-.0841	-.0771	-.0122
90.000		.7562	.3651	-.0790	-.3530	-.3906	-.3643	-.1244	.5172		-.3957	-.1940	-.0473	-.0614	-.0700
120.000			.3291	-.1070	-.3758	-.3992	-.3778	-.1053	.1441	-.0162	-.3189	-.0698	-.0463	-.0434	-.0651
135.000								-.1063		.1621		-.2897		-.0551	
150.000			.3371	-.1077	-.3758	-.4209	-.4040	-.1026	.0470	.2363	.0177	-.4237	-.1342	-.1274	-.1107
165.000				-.0979	-.3680	-.4227	-.2797	-.1168	.0560	.2275	.1717	-.3227	-.0997	-.0637	-.0804
180.000	1.1420	.7056	.3830	-.0776	-.3603	-.4158	-.4796	-.0843	.0906	.1913	[illegible]	-.2709	-.0776	-.0985	-.0602
270.000		1.1420							.4933						

X/LT	.7480	.8530	.9280
PHI			

ARC11-7* IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T39)

ALPHAT(5) = 7.980 BETAT (5) = 8.290

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0462	.0328	.0332
30.000	.0305	.0144	.0541
60.000	.0554	.0925	.1382
90.000	.0392	.1473	
120.000	.0726	.1510	.1081
135.000	.0584	.1535	.0874
150.000	.0368	.1117	-.0418
165.000	.0602	.1345	.2582
180.000	.0447	.1268	.0162

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T40) (14 FEB 74)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES
LREF = 38.7090 INCHES YMRP = .0000 INCHES
BREF = 38.7090 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 1.400 ELEVON = .000
RUDDER = .000 SPDBRK = .000

ALPHAT(1) = -8.470 BETAT (1) = -8.190

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2470	.8032	.4270	.0182	-.2303	-.2745	-.3230	-.2882	-.2339	.0903	-.0547	-.1884	-.1813	-.1586	-.0637
30.000			.5123	.0912	-.1806	-.2319	-.2914	-.2804	-.0726	-.1978	-.4026	-.2090	-.1337	-.1454	-.1387
60.000			.6563	.2132	-.0878	-.1436	-.2215	-.2031	.0861	-.2874	-.5099	-.3652	-.2914	-.0099	-.0181
90.000		1.2060	.8173	.3497	.0209	-.0449	-.1275	-.0634	.6106		-.4876	-.0909	-.1754	-.0743	-.0599
120.000			.9181	.4432	.0934	.0213	-.0622	-.0381	.5563	.1927	-.0963	.3921	.2510	.1639	.0299
135.000								-.0310		.2298		.2704		.1925	
150.000			.9351	.4527	.1011	.0293	-.0627	-.0298	.2113	.4386	.3527	.2066	.0906	.0752	.0201
165.000				.4115	.0661	-.0025	-.0876	-.0613	-.0246	.5527	.4578	.2767	.0097	.0253	.0149
180.000	1.2470	1.2580	.8326	.3605	.0294	-.0354	-.1108	-.0986	-.0310	.5288	.4352	.2144	.0268	.0413	-.0671
270.000		.8060							.3694						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0308	-.0665	-.0371
30.000	-.0891	-.0761	.0718
60.000	-.0674	-.0761	.0918
90.000	-.1383	-.2282	
120.000	-.0222	.0338	.4216
135.000	-.0009	.149	.3153
150.000	-.0314	.1624	.2771
165.000	-.0716	.1385	.5369
180.000	-.1170	.0906	.3225

ALPHAT(1) = -8.440 BETAT (2) = -4.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2910	.8403	.4538	.0301	-.2119	-.2564	-.3070	-.2778	-.2102	.1129	.0213	-.1292	-.2169	-.1555	.0045
30.000			.4946	.0656	-.1905	-.2400	-.2946	-.2694	-.1477	-.1109	-.2180	-.2098	-.1411	-.1061	-.0700
60.000			.5906	.1446	-.1352	-.1893	-.2621	-.2384	.0756	-.2875	-.4655	-.3857	-.2574	-.0833	-.0588
90.000		1.1180	.7158	.2548	-.0522	-.1155	-.1910	-.1311	.5945		-.4318	-.1139	-.2235	-.1751	-.1228
120.000			.8246	.3506	.0185	-.0477	-.1265	-.1066	.3949	.2431	-.0450	.3105	.1600	.1030	-.0377
135.000								-.0842		.3812		.1951		.1356	
150.000			.8788	.3936	.0543	-.0142	-.1064	-.0665	.1530	.4908	.3074	.1464	.0037	.0271	-.0502

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T40)

ALPHAT(1) = -8.440 BETAT (2) = -4.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
165.000				.3928	.0538	-.0137	-.0995	-.0784	-.0211	.4668	.4831	.2232	.0845	-.0036	-.0028
180.000	1.2910	1.2740	.8508	.3696	.0400	-.0289	-.1053	-.1000	-.0163	.4156	.5109	.2152	-.0041	.0271	-.0171
270.000		.9088							.5162						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0008	-.0181	-.0019
30.000	-.0299	-.0252	.0363
60.000	-.0355	-.0139	.1448
90.000	-.0629	-.0388	
120.000	-.0785	-.0166	.3431
135.000	-.0533	.0987	.2458
150.000	-.1188	.1105	.1741
165.000	-.1006	.1192	.4218
180.000	-.1021	.1180	.2829

ALPHAT(1) = -8.420 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3120	.8614	.4615	.0368	-.2126	-.2545	-.3092	-.2824	-.1792	.1052	.0365	-.1292	-.2314	-.1574	.0060
30.000			.4748	.0494	-.2059	-.2533	-.3080	-.2650	-.1113	.0120	-.1318	-.2121	-.1538	-.1246	-.0372
60.000			.5221	.0902	-.1810	-.2289	-.2953	-.2476	.0799	-.2758	-.4812	-.3666	-.1147	-.0509	-.0632
90.000		1.0220	.6167	.1699	-.1239	-.1807	-.2516	-.2231	.5820		-.3102	-.1679	-.2735	-.0490	-.1099
120.000			.7254	.2674	-.0518	-.1136	-.1916	-.1713	.2610	.3377	.0324	.2347	.0725	.0419	-.0876
135.000								-.1496		.4005		.1645		.0511	
150.000			.8154	.3343	.0028	-.0609	-.1474	-.1214	.0078	.5122	.2047	.0257	-.0442	-.0500	-.1432
165.000				.3719	.0323	-.0346	-.1217	-.0987	-.0451	.5374	.4276	.1373	.0778	.0125	-.0326
180.000	1.3120	1.2810	.8670	.3779	.0408	-.0291	-.1116	-.0856	-.0126	.4013	.5168	.1866	.0986	-.0016	-.0889
270.000		1.0210							.5757						

X/LT	.7460	.8530	.9280
PHI			
.000	.0166	-.0151	.0229
30.000	-.0100	-.0186	.0264
60.000	-.0251	-.0126	.1452
90.000	-.0652	-.0043	
120.000	-.1199	-.0050	.1475
135.000	-.1333	.0558	.0917
150.000	-.1737	.0342	.0807

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T40)

ALPHAT(1) = -8.420 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
165.000	-.1156	.0676	.3143
180.000	-.1555	.0606	.2595

ALPHAT(1) = -8.430 BETAT (4) = 4.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2930	.8452	.4551	.0365	-.2131	-.2578	-.3073	-.2839	-.1957	.0851	.0023	-.1353	-.2229	-.1541	.0080
30.000			.4493	.0265	-.2186	-.2631	-.3063	-.2776	-.0492	.0353	-.0442	-.2015	-.1656	-.1169	-.0091
60.000			.4536	.0375	-.2103	-.2553	-.3078	-.2659	.0578	-.2259	-.4679	-.2667	-.0766	-.0960	-.0552
90.000		.9151	.5175	.0889	-.1786	-.2281	-.2913	-.1962	.5479		-.2336	-.2051	-.2917	-.0271	-.0887
120.000			.6149	.1795	-.1166	-.1728	-.2393	-.2218	.1561	.4404	.1179	.1711	.0339	.0268	-.1304
135.000								-.1886		.1889		.0911		-.0141	
150.000			.7284	.2691	-.0461	-.1054	-.1902	-.1623	.2241	.3664	.2395	-.1353	-.0209	-.1142	-.2091
165.000				.3410	.0105	-.0581	-.1385	-.1172	-.0302	.3727	.4057	.0566	.0422	.0689	-.0908
180.000	1.2930	1.2760	.8568	.3747	.0412	-.0274	-.1096	-.0720	.0778	.3510	.4799	.1620	.1224	.0092	-.0850
270.000		1.1250							.5910						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0008	-.0216	-.0075
30.000	-.0141	-.0272	.0233
60.000	-.0229	-.0196	.1545
90.000	-.0723	-.0100	
120.000	-.0978	-.0130	.0457
135.000	-.1107	-.0060	.0112
150.000	-.1374	-.0206	-.0846
165.000	-.0972	.0276	.1676
180.000	-.1376	.0510	.0725

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T40)

ALPHAT(1) = -8.330 BETAT (5) = 8.270

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2470	.7998	.4230	.0155	-.2426	-.2893	-.3426	-.3062	-.1485	.0591	-.0376	-.1803	-.1809	-.1647	-.0864
30.000			.3842	-.0130	-.2553	-.2979	-.3396	-.2963	-.0102	.0359	-.0728	-.2186	-.2364	-.1300	-.0399
60.000			.3849	-.0152	-.2566	-.2994	-.3308	-.1389	-.0712	-.1911	-.4167	-.2505	-.0915	-.0705	-.0677
90.000		.8136	.4235	.0157	-.2421	-.2916	-.3285	-.0528	.4370		-.1661	-.2480	-.2124	-.0902	-.0848
120.000			.5132	.0956	-.1910	-.2448	-.2925	-.2263	.0861	.3530	.2196	.0959	-.0137	-.0206	-.2015
135.000								-.2443		.1959		.0362		-.0715	
150.000			.6411	.1978	-.1105	-.1673	-.2355	-.2180	.1835	.3205	.2146	-.2401	-.0915	-.2367	-.2971
165.000				.2872	-.0328	-.0982	-.1666	-.1493	.0470	3099	.3183	-.0941	.0411	-.0292	-.1772
180.000	1.2470	1.1860	.8343	.3574	.0198	-.0482	-.1184	-.0454	.1376	.2855	.4104	.1688	.0643	-.0892	-.1298
270.000		1.2140							.6124						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0271	-.0574	-.0370
30.000	-.0503	-.0597	-.0092
60.000	-.0666	-.0536	.1320
90.000	-.1429	-.1146	
120.000	-.1457	-.0669	.0173
135.000	-.1767	-.0701	-.0297
150.000	-.1816	-.0925	-.1549
165.000	-.1595	-.0609	.1100
180.000	-.1981	-.0581	.0080

ALPHAT(2) = -4.360 BETAT (1) = -8.200

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3020	.9100	.5240	.0957	-.1772	-.2280	-.2869	-.2675	-.2182	.1066	-.0002	-.1443	-.1557	-.1631	-.0808
30.000			.6252	.1777	-.1164	-.1752	-.2388	-.2228	-.0347	-.0712	-.3158	-.2334	-.0796	-.1020	-.1275
60.000			.7445	.2829	-.0354	-.0947	-.1779	-.1473	.2077	-.1342	-.4081	-.2285	-.2425	-.0226	.0316
90.000		1.2520	.8444	.3661	.0340	-.0323	-.1173	-.0964	.6420		-.4434	-.2540	-.1839	-.0626	-.0264
120.000			.8744	.3932	.0550	-.0143	-.0969	-.0627	.4605	.1093	-.2203	.2559	.2262	.1684	.0374
135.000								-.0952		.1420		.1534		.1780	
150.000			.8484	.3654	.0327	-.0346	-.1208	-.0945	.1269	.1999	.2361	.0897	.0804	.0630	.0224
165.000				.3167	-.0071	-.0727	-.1521	-.1294	-.0951	.4574	.4078	.2350	-.0422	-.0304	.0158
180.000	1.3020	1.1760	.7338	.2728	-.0459	-.1036	-.1731	-.1581	-.0996	.4810	.4013	.1743	-.0643	.0559	-.1072
270.000		.8523							.5443						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T40)

ALPHAT(2) = -4.360 BETAT (1) = -8.200

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0367	-.0581	-.0148
30.000	-.0714	-.0540	.0262
60.000	-.0213	.0015	.1536
90.000	-.0369	-.0543	
120.000	-.0156	.0756	.4562
135.000	.0023	.1756	.3851
150.000	-.0376	.1965	.2953
165.000	-.0742	.1863	.5308
180.000	-.1076	.1523	.3411

ALPHAT(2) = -4.340 BETAT (2) = -4.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5560	.6380
PHI															
.000	1.3390	.9528	.5472	.1031	-.1710	-.2202	-.2758	-.2498	-.1968	.1624	.0607	-.1221	-.2017	-.1358	-.0142
30.000			.5960	.1472	-.1375	-.1921	-.2514	-.2307	-.1212	-.0064	-.1776	-.1854	-.0793	-.0819	-.0807
60.000			.6688	.2080	-.0958	-.1484	-.2221	-.1946	.2100	-.1307	-.4008	-.2217	-.1286	-.0824	.0001
90.000		1.1610	.7439	.2750	-.0464	-.1089	-.1800	-.1505	.6282		-.4483	-.2169	-.2377	-.0105	-.0549
120.000			.7872	.3163	-.0136	-.0804	-.1551	-.1232	.3932	.1343	-.1822	.2237	.1297	.0737	-.0210
135.000								-.1318		.2265		.0278		.1340	
150.000			.7947	.3193	-.0096	-.0722	-.1568	-.1273	-.0022	.4180	.2467	.0152	-.0431	.0076	-.0363
165.000				.3040	-.0216	-.0866	-.1639	-.1414	-.0756	.4088	.3997	.1860	.0138	-.0521	-.0199
180.000	1.3390	1.1840	.7472	.2785	-.0370	-.1005	-.1722	-.1590	-.0161	.2942	.4314	.1742	-.1144	.0360	-.0448
270.000		.9343							.5995						

X/LT	.7460	.8530	.9280
PHI			
.000	.0022	-.0145	.0132
30.000	-.0413	-.0185	.0664
60.000	-.0114	.0081	.1468
90.000	-.0504	.0016	
120.000	-.0778	.0184	.3730
135.000	-.0644	.1276	.3170
150.000	-.1104	.1527	.2354
165.000	-.0991	.1613	.4155
180.000	-.0738	.1249	.2856

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T40)

ALPHAT(2) = -4.250 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3590	.9712	.5546	.1094	-.1637	-.2155	-.2705	-.2500	-.1884	.1508	.0817	-.1061	-.1970	-.1307	-.0069
30.000			.5633	.1189	-.1545	-.2105	-.2662	-.2445	-.1455	.0659	-.0813	-.1520	-.1236	-.0931	-.0416
60.000			.5931	.1425	-.1383	-.1908	-.2599	-.2121	.2306	-.1050	-.3781	-.2171	-.0565	-.0941	-.0685
90.000		1.0660	.6417	.1873	-.1094	-.1689	-.2356	-.1808	.6325		-.4352	-.1741	-.2727	.0006	-.0607
120.000			.6925	.2341	-.0746	-.1336	-.2073	-.1924	.2203	.1937	-.1339	.2476	.0366	-.0024	-.0556
135.000								-.1735		.3281		.0004		.0393	
150.000			.7333	.2664	-.0499	-.1097	-.1914	-.1599	.1252	.2995	.2472	-.0603	-.0982	-.0014	-.1221
165.000				.2778	-.0412	-.1017	-.1778	-.1566	-.0890	.3693	.3731	.0808	.0147	.0444	-.0275
180.000	1.3590	1.1870	.7573	.2823	-.0355	-.0995	-.1743	-.1490	.0122	.3160	.4486	.1271	-.0029	.0730	-.0551
270.000		1.0660							.6126						

X/LT	.7460	.8530	.9280
PHI			
.000	.0207	.0424	.0313
30.000	-.0069	-.0062	.0401
60.000	.0009	.0112	.1572
90.000	-.0528	.0433	
120.000	-.1219	.0519	.2090
135.000	-.1297	.1079	.1612
150.000	-.1770	.1074	.1009
165.000	-.0842	.1145	.3135
180.000	-.1340	.1140	.2467

ALPHAT(2) = -4.260 BETAT (4) = 4.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3420	.9512	.5459	.1083	-.1624	-.2124	-.2706	-.2519	-.1962	.1370	.0603	-.1080	-.1980	-.1459	-.0148
30.000			.5199	.0855	-.1773	-.2273	-.2775	-.2555	-.0372	.0480	-.0099	-.1411	-.2288	-.1085	-.0143
60.000			.5161	.0845	-.1781	-.2263	-.2857	-.2403	.0980	-.0741	-.3243	-.2082	-.0645	-.0444	-.0840
90.000		.9597	.5422	.1091	-.1644	-.2141	-.2734	-.2295	.6374		-.4209	-.1805	-.2985	-.0060	-.0994
120.000			.5945	.1569	-.1296	-.1858	-.2509	-.2300	.1209	.2710	-.0546	.1513	-.0314	-.0379	-.1128
135.000								-.2116		.1604		.0179		-.0329	
150.000			.6598	.2075	-.0935	-.1470	-.2250	-.1970	.1815	.2808	.2016	-.2080	-.1205	-.0696	-.1959
165.000				.2494	-.0579	-.1179	-.1942	-.1733	.0196	.3227	.3325	.0078	-.0402	.0432	-.0850
180.000	1.3420	1.1830	.7477	.2802	-.0363	-.0975	-.1728	-.1352	.0204	.2978	.4316	.1155	.0348	-.0143	-.0883
270.000		1.1660							.6354						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T40)

ALPHAT(2) = -4.260 BETAT (4) = 4.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0018	-.0171	.0181
30.000	.0023	-.0111	.0494
60.000	-.0324	-.0136	.1280
90.000	-.0517	.0309	
120.000	-.0772	.0294	.0761
135.000	-.0901	.0291	.0449
150.000	-.1052	.0173	-.0408
165.000	-.0938	.0605	.1825
180.000	-.1246	.0848	.0831

ALPHAT(2) = -4.260 BETAT (5) = 8.210

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2970	.9057	.5195	.0947	-.1783	-.2293	-.2858	-.2703	-.2237	.0729	.0148	-.1372	-.1807	-.1637	-.0886
30.000			.4614	.0434	-.2116	-.2567	-.3081	-.2799	-.0133	.0608	-.0543	-.1845	-.2341	-.1339	-.0372
60.000			.4459	.0242	-.2193	-.2579	-.3172	-.2809	.0478	-.0221	-.2664	-.0866	-.0892	-.0610	-.0435
90.000		.8559	.4554	.0372	-.2116	-.2581	-.3101	-.0423	.5052		-.4148	-.2402	-.1690	-.0244	-.0942
120.000			.5044	.0805	-.1860	-.2335	-.2943	-.2595	.0495	.3411	.0324	.0571	-.0938	-.0605	-.1915
135.000								-.2567		.0284		-.0161		-.0949	
150.000			.5832	.1427	-.1413	-.1932	-.2663	-.2429	.1310	.2931	.1362	-.2763	-.1667	-.2153	-.2679
165.000				.2087	-.0888	-.1482	-.2217	-.2033	.1121	.2511	.2692	-.1578	-.0589	-.0580	-.1650
180.000	1.2973	1.0650	.7268	.2617	-.0497	-.1109	-.1864	-.1249	.0900	.2242	.3499	.1107	-.0171	-.1351	-.1349
270.000		1.2530							.6532						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0399	-.0562	-.0166
30.000	-.0176	-.0342	.0146
60.000	-.0427	-.0446	.1350
90.000	-.0985	-.0668	
120.000	-.1195	-.0216	.0860
135.000	-.1498	-.0201	.0287
150.000	[illegible]2	-.0398	-.0962
165.000	[illegible]2	-.0201	.1340
180.000	[illegible].82	-.0231	.0086

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T40)

ALPHAT(3) = -.560 BETAT (1) = -8.230

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3110	.9975	.8084	.1615	-.1245	-.1790	-.2419	-.2302	-.1988	.0410	.0310	-.1087	-.1183	-.1413	-.1035
30.000			.7158	.2550	-.0562	-.1176	-.1857	-.1700	-.0144	.0130	-.2429	-.1555	-.0407	-.0715	-.0803
60.000			.8113	.3357	.0102	-.0552	-.1384	-.0977	.3412	-.0290	-.2791	-.1616	-.1102	-.0717	.0228
90.000		1.2690	.8557	.3744	.0433	-.0279	-.1110	-.0847	.6547		-.3627	-.3804	-.1944	-.1716	-.0315
120.000			.8243	.3514	.0201	-.0463	-.1261	-.1083	.3439	.0118	-.2169	-.1099	.2189	.1871	.0638
135.000								-.1296		.0475		.0379		.1616	
150.000			.7615	.2914	-.0287	-.0918	-.1705	-.1464	.0820	.0700	.1508	.0414	-.0420	.0276	.0406
165.000				.2315	-.0765	-.1342	-.2076	-.1850	-.1490	.3025	.3745	.2021	-.1099	-.0337	.0311
180.000	1.3110	1.0860	.6361	.1884	-.1092	-.1626	-.2259	-.2039	-.1558	.4232	.3745	.1388	-.1406	-.0114	-.1140
270.000		.8574							.6482						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0622	-.0506	-.0102
30.000	-.0677	-.0264	.0227
60.000	.0158	.0350	.1501
90.000	-.0242	-.0355	
120.000	.0098	.1783	.5572
135.000	.0341	.2757	.4905
150.000	-.0125	.2822	.4368
165.000	-.0446	.2718	.5402
180.000	-.0217	.2273	.3519

ALPHAT(3) = -.540 BETAT (2) = -4.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3590	1.0470	.6385	.1814	-.1189	-.1728	-.2379	-.2199	-.1693	.2022	.1014	-.0820	-.1456	-.1382	-.0525
30.000			.6880	.2261	-.0831	-.1442	-.2120	-.1920	-.1258	.0721	-.1186	-.1137	-.0639	-.0647	-.0663
60.000			.7342	.2641	-.0546	-.1134	-.1947	-.1505	.3291	-.0170	-.2777	-.1788	-.0450	-.0645	-.0455
90.000		1.1790	.7579	.2863	-.0387	-.0998	-.1771	-.1444	.6399		-.3783	-.3802	-.2088	-.1100	-.0470
120.000			.7462	.2773	-.0454	-.1055	-.1817	-.1558	.3537	.0290	-.2199	-.1281	.1332	.0842	.0104
135.000								-.1675		.1193		-.0212		.0967	
150.000			.7167	.2471	-.0655	-.1246	-.1998	-.1741	-.0571	.2842	.1413	-.0350	-.1573	-.0360	.0049
165.000				.2207	-.0896	-.1484	-.2164	-.1912	-.1192	.3338	.3268	.1603	-.1002	-.0691	.0207
180.000	1.3590	1.0940	.6558	.1968	-.1020	-.1589	-.2259	-.2079	.0621	.2135	.3707	.1272	-.1542	-.0011	-.0523
270.000		.9573							.0404						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T40)

ALPHAT(3) = -.540 BETAT (2) = -4.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	-.0019	-.0047	.0189
30.000	-.0312	-.0089	.0549
60.000	-.0021	.0304	.1461
90.000	-.0387	.0396	
120.000	-.0520	.1376	.4230
135.000	-.0277	.2177	.3972
150.000	-.0695	.2352	.3026
165.000	-.0713	.2372	.4653
180.000	-.0660	.1997	.3051

ALPHAT(3) = -.540 BETAT (3) = -.010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3760	1.0650	.6434	.1887	-.1101	-.1674	-.2316	-.2115	-.1592	.1908	.1222	-.0633	-.1427	-.1234	-.0262
30.000			.6451	.1882	-.1091	-.1676	-.2277	-.2095	-.1347	.0808	-.0146	-.0874	-.1323	-.0752	-.0247
60.000			.6446	.1900	-.1046	-.1592	-.2322	-.1886	.2660	.0109	-.2512	-.1988	-.0922	-.0237	-.0617
90.000		1.0810	.6484	.1970	-.1019	-.1560	-.2251	-.1750	.6504		-.3769	-.3680	-.2330	-.0831	-.0708
120.000			.6519	.2007	-.0997	-.1567	-.2221	-.1859	.2637	.0851	-.0759	-.1468	.0551	-.0032	-.0177
135.000								-.1987		.2209		-.0919		.0260	
150.000			.6513	.2047	-.0980	-.1533	-.2304	-.1909	-.0141	.3094	.1625	-.0612	-.2079	-.0736	-.0743
165.000				.2027	-.0982	-.1523	-.2241	-.1994	-.1098	.2926	.3751	.0810	-.0403	-.0698	-.0187
180.000	1.3760	1.0940	.6646	.2007	-.0964	-.1533	-.2234	-.1911	.0206	.2741	.4087	.0757	-.0689	-.1385	.0103
270.000		1.0810							.6323						

X/LT	.7460	.8530	.9280
PHI			
.000	.0148	.0186	.0487
30.000	.0090	.0103	.0567
60.000	-.0277	.0188	.1210
90.000	-.0360	.0679	
120.000	-.0846	.0980	.2788
135.000	-.0778	.1044	.2242
150.000	-.1147	.1686	.1328
165.000	-.0721	.1744	.3244
180.000	-.0656	.1736	.2528

ARC11-716 IA14 01+T12+S12N25+AT11 EXTERNAL TANK (RB1T40)

ALPHAT(3) = -.550 BETAT (4) = 4.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3550	1.0460	.6337	.1803	-.1097	-.1644	-.2281	-.2123	-.1635	.1621	.1049	-.0746	-.1493	-.1381	-.0475
30.000			.5873	.1416	-.1394	-.1924	-.2484	-.2304	-.1048	.1309	.0063	-.1047	-.2029	-.1029	-.0287
60.000			.5586	.1167	-.1521	-.2016	-.2678	-.2399	.0769	.0503	-.2055	-.2201	-.0252	-.0467	-.0187
90.000		.9745	.5529	.1144	-.1548	-.2070	-.2665	-.2181	.6513		-.3739	-.3249	-.2510	-.1187	-.1144
120.000			.5691	.1291	-.1493	-.2004	-.2610	-.2379	.1343	.1516	-.0235	-.1503	-.0122	-.0623	-.0610
135.000								-.2273		.2234		-.0632		-.0529	
150.000			.6065	.1553	-.1310	-.1810	-.2540	-.2186	.1439	.1837	.1857	-.2257	-.2189	-.0799	-.1635
165.000				.1807	-.1100	-.1630	-.2351	-.2125	.0996	.2770	.2940	.0048	-.1100	-.0270	-.0590
180.000	1.3550	1.0970	.6598	.2013	-.0939	-.1508	-.2203	-.1819	.0328	.2342	.3876	.0564	-.0275	-.0315	-.0640
270.000		1.1810							.6365						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0025	-.0043	.0240
30.000	-.0015	.0030	.0807
60.000	-.0030	.0065	.1354
90.000	.0045	.0322	
120.000	-.0160	.0765	.0947
135.000	-.0348	.0775	.0805
150.000	-.0451	.0635	-.0063
165.000	-.0336	.1097	.2139
180.000	-.0619	.1384	.1027

ALPHAT(3) = -.550 BETAT (5) = 8.210

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3140	1.0010	.6103	.1640	-.1240	-.1845	-.2484	-.2323	-.1947	.1095	.0204	-.1095	-.1418	-.1495	-.0991
30.000			.5202	.0882	-.1792	-.2325	-.2896	-.2656	-.0117	.0565	-.0603	-.1758	-.2349	-.1071	-.0367
60.000			4812	.0497	-.2035	-.2464	-.3092	-.2737	.0325	.0844	-.1393	-.2177	-.0424	-.0807	-.0231
90.000		.8704	.4650	.0392	-.2082	-.2504	-.3057	-.2648	.6556		-.3744	-.2556	-.2771	-.1241	-.1118
120.000			.4808	.0570	-.1975	-.2432	-.2976	-.2789	-.0168	.2015	.0393	-.1158	-.0972	-.1120	-.1354
135.000								-.2683		.0688		-.1102		-.1113	
150.000			.5333	.0960	-.1732	-.2225	-.2898	-.2615	.0982	.1733	.1154	-.3092	-.2258	-.1676	-.2139
165.000				.1404	-.1374	-.1950	-.2631	-.2431	.1133	.2116	.2480	-.1651	-.1096	-.0850	-.1804
180.000	1.3140	1.0040	.6401	.1828	-.1086	-.1659	-.2379	-.1924	.0643	.1835	.2975	.0357	-.1152	-.1133	-.1165
270.000		1.2730							.6663						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12NB5+AT11 EXTERNAL TANK (RB1T40)

ALPHAT(3) = -.550 BETAT (3) = 0.210

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	-.0512	-.0476	-.0080
30.000	-.0170	-.0221	.0214
60.000	-.0165	-.0254	.1559
90.000	-.0281	-.0021	
120.000	-.0758	.0253	.1647
135.000	-.1028	.0409	.0774
150.000	-.1153	.0203	-.0733
165.000	-.0911	.0314	.1961
180.000	-.1302	.0294	.0302

ALPHAT(4) = 4.070 BETAT (1) = -0.210

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3020	1.1040	.7151	.2612	-.0539	-.1152	-.1852	-.1649	-.1389	.0271	.0682	-.0570	-.0816	-.0787	-.0775
30.000			.8267	.3522	.0184	-.0476	-.1216	-.1047	.0745	.1176	-.1436	-.0833	.0177	.0030	-.0354
60.000			.8780	.3933	.0575	-.0091	-.0987	-.0613	.4757	.0846	-.1876	-.0988	.0308	.0402	.0128
90.000		1.2550	.8470	.3699	.0403	-.0305	-.1125	-.0493	.6458		-.3066	-.1839	-.0875	-.1575	-.1653
120.000			.7481	.2864	-.0306	-.0963	-.1689	-.1557	.2213	-.1263	-.3038	-.3391	.0810	.1429	.1322
135.000								-.1888		-.0740		-.1134		.0781	
150.000			.6487	.1977	-.0982	-.1560	-.2296	-.2074	.0341	-.0580	.1387	-.0525	-.1714	-.0399	.0650
165.000				.1322	-.1445	-.1989	-.2642	-.2430	-.1905	.2117	.3345	.1684	-.1646	-.0574	.0715
180.000	1.3020	.9732	.5308	.1015	-.1715	-.2219	-.2745	-.2365	-.1965	.2975	.3615	.1014	-.1681	-.1694	-.0235
270.000		.8501							.6254						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0787	-.0377	-.0216
30.000	-.0320	.0066	.0167
60.000	.0017	.0675	.0868
90.000	-.1149	-.1036	
120.000	.0810	.2913	.6787
135.000	.1090	.3784	.6133
150.000	.0775	.3659	.5681
165.000	.0640	.3511	.5753
180.000	.0865	.2954	.3563

ARC11-715 IA14 OL+T12+S12NE5+AT11 EXTERNAL TANK (RB1T40)

ALPHAT(4) = 4.090 BETAT (2) = -4.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3490	1.1570	.7444	.2741	-.0414	-.1020	-.1745	-.1609	-.1249	.2055	.1398	-.0197	-.0616	-.0702	-.0217
30.000			.7865	.3103	-.0117	-.0779	-.1521	-.1332	-.0729	.1544	-.0353	-.0415	-.0202	-.0074	-.0202
60.000			.7880	.3106	-.0147	-.0771	-.1581	-.1272	.4037	.1060	-.1889	-.1247	.0419	.0237	-.0097
90.000		1.1570	.7416	.2759	-.0471	-.1062	-.1789	-.1212	.6332		-.3206	-.1920	-.0523	-.1006	-.1162
120.000			.6675	.2125	-.0948	-.1904	-.2176	-.1993	.2108	-.2168	-.2831	-.3599	-.0179	.0893	.0790
135.000								-.2166		-.0272		-.1257		.0094	
150.000			.6099	.1586	-.1315	-.1867	-.2523	-.2249	-.0938	.1408	.1534	-.0867	-.2290	-.0988	.0442
165.000				.1229	-.1561	-.2102	-.2706	-.2405	-.1479	.2335	.3054	.1356	-.2295	-.1765	.0374
180.000	1.3490	.9706	.5441	.1034	-.1688	-.2185	-.2764	-.2500	.0362	.1679	.3662	.0637	-.1475	-.2528	.0279
270.000		.9529							.6109						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0307	.0091	.0588
30.000	-.0147	.0261	.0618
60.000	-.0107	.0591	.0816
90.000	-.0912	-.0695	
120.000	.0144	.2049	.5379
135.000	.0367	.2960	.4698
150.000	.0198	.3095	.4321
165.000	.0355	.3120	.4638
180.000	.0561	.2665	.5130

ALPHAT(4) = 4.010 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3650	1.1730	.7543	.2784	-.0368	-.0980	-.1741	-.1580	-.1120	.2230	.1637	-.0091	-.0858	-.0829	-.0104
30.000			.7959	.2617	-.0492	-.1119	-.1803	-.1605	-.0533	.1042	.0669	-.0282	-.0814	-.0387	-.0207
60.000			.6895	.2286	-.0728	-.1297	-.2054	-.1831	.1513	.1407	-.1726	-.1213	.0192	.0011	-.0304
90.000		1.0620	.6406	.1857	-.1074	-.1637	-.2273	-.2079	.6140		-.3399	-.2079	.0154	-.0414	-.0632
120.000			.5920	.1476	-.1342	-.1890	-.2686	-.2017	.2510	-.1801	-.2429	-.2869	-.0039	.0006	.0299
135.000								-.2172		.1147		-.1710		-.0414	
150.000			.5696	.1261	-.1525	-.2016	-.2662	-.2273	-.0254	.2157	.1692	-.1310	-.2522	-.1296	-.0052
165.000				.1205	-.1572	-.2060	-.2732	-.2441	.0794	.2052	.3458	.1029	-.0970	-.1468	.0251
180.000	1.3650	.9764	.5551	.1160	-.1592	-.2095	-.2715	-.2378	.0521	.1957	.3678	.0116	-.0803	-.2422	.0379
270.000		1.0700							.6232						

X/LT	.7460	.8530	.9280
PHI			

ARC11-T16 IA14 OL+T12+S12NOS+AT11 EXTERNAL TANK (RB1T40)

ALPHAT(4) = 4.010 BETAT (3) = .000

SECTION (11)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	-.0049	.0288	.0535
30.000	.0038	.0363	.0923
60.000	-.0114	.0535	.1147
90.000	-.0419	.0520	
120.000	-.0112	.1560	.3171
135.000	.0066	.2142	.2702
150.000	-.0122	.2194	.1775
165.000	.0323	.2297	.3329
180.000	.0368	.2259	.2397

ALPHAT(4) = 4.040 BETAT (4) = 4.110

SECTION (11)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5150	.5580	.6380
PHI															
.000	1.3440	1.1500	.7419	.2758	-.0388	-.1009	-.1711	-.1592	-.1188	.1328	.1461	-.0202	-.0899	-.0847	-.0197
30.000			.6687	.2118	-.0668	-.1464	-.2109	-.1938	-.1223	.2115	.0892	-.0681	-.1204	-.0708	-.0292
60.000			.5955	.1516	-.1328	-.1835	-.2524	-.2000	.2017	.1658	-.1384	-.1247	-.0031	-.0744	-.0309
90.000		.9599	.5463	.1109	-.1630	-.2097	-.2722	-.2393	.6195		-.3400	-.1762	.0179	-.0844	-.0608
120.000			.5165	.0906	-.1756	-.2248	-.2772	-.2323	.1712	.0025	-.1674	-.2338	-.0254	-.0656	-.0072
135.000								-.2488		.1613		-.1267		-.0867	
150.000			.5204	.0891	-.1741	-.2216	-.2852	-.2448	.0959	.1955	.1838	-.2189	-.2669	-.1494	-.0580
165.000				.1006	-.1694	-.2179	-.2767	-.2511	.0964	.2310	.2685	.0215	-.1363	-.1680	.0257
180.000	1.3440	.9798	.5535	.1141	-.1578	-.2107	-.2719	-.2348	.0380	.1751	.3534	.0098	-.0612	-.1748	.0070
195.000		1.1720							.6412						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0137	.0095	.0554
30.000	-.0057	.0157	.0709
60.000	-.0022	.0200	.1165
90.000	.0073	.0439	
120.000	.0462	.1370	.1290
135.000	.0370	.1375	.1106
150.000	.0210	.1830	.0892
165.000	.0332	.1570	.2093
180.000	.0222	.1937	.1021

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T4D)

ALPHAT(4) = 4.060 BETAT (5) = 9.240

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2990	1.1080	.7193	.2623	-.0497	-.1111	-.1872	-.1686	-.1408	.0802	.0530	-.0570	-.0889	-.0939	-.0769
30.000			.5941	.1567	-.1328	-.1875	-.2520	-.2358	-.0929	.1464	.0310	-.1005	-.1492	-.0942	-.0364
60.000			.5020	.0728	-.1902	-.2357	-.2895	-.2504	.0798	.1956	-.0601	-.1376	-.0373	-.0794	-.0477
90.000		.8542	.4359	.0362	-.2107	-.2548	-.3035	-.2433	.6298		-.3297	-.0992	.0510	-.1023	-.0449
120.000			.4425	.0260	-.2169	-.2619	-.3113	-.2784	.0517	.0515	-.1068	-.2007	-.0553	-.1030	-.0656
135.000								-.2779		.1474		-.1422		-.1156	
150.000			.4649	.0402	-.2075	-.2520	-.3148	-.2789	.0592	.1309	.1294	-.2937	-.2563	-.1583	-.1510
165.000				.0675	-.1914	-.2417	-.3023	-.2804	.0592	.1891	.2413	-.1207	-.1391	-.1133	-.0900
180.000	1.2990	.8978	.5294	.0931	.1724	-.2226	-.2880	-.2692	.0235	.1539	.2421	-.0042	-.1386	-.0958	-.0802
270.000		1.2560							.6538						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0769	-.0393	-.0083
30.000	-.0257	-.0095	.0361
60.000	-.0287	-.0018	.1437
90.000	-.0215	.0591	
120.000	.0087	.1030	.1564
135.000	-.0158	.1110	.1100
150.000	-.0373	.0895	-.0587
165.000	-.0010	.0990	.2944
180.000	-.0431	.0915	.0631

ALPHAT(5) = 8.120 BETAT (1) = -8.220

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2580	1.1920	.8170	.3472	.0177	-.0498	-.1241	-.1095	-.0818	.0755	.0995	-.0014	-.0205	-.0205	-.0298
30.000			.9250	.4404	.0941	.0219	-.0622	-.0413	.1443	.1913	-.0566	-.0069	.0507	.0480	.0249
60.000			.9240	.4441	.0966	.0277	-.0683	-.0366	.5392	.1712	-.1643	-.0119	.0593	.0738	.0499
90.000		1.2140	.8223	.3554	.0249	-.0431	-.1259	-.0756	.6100		-.2922	-.1149	-.0114	.0574	.0995
120.000			.6649	.2201	-.0841	-.1442	-.2169	-.1747	.0959	-.2762	-.3190	-.2427	-.0360	.0630	.1141
135.000								-.2391		-.2152		-.2206		.0690	
150.000			.5475	.1176	-.1651	-.2167	-.2846	-.2677	-.0746	-.1954	.0264	-.0990	-.1545	-.0182	.0735
165.000				.0509	-.2085	-.2557	-.3170	-.2833	-.1911	.1261	.2101	.1348	-.1760	-.0340	.0780
180.000	1.2580	.8633	.4371	.0244	-.2269	-.2706	-.3176	-.2776	-.1483	.2411	.3313	.0610	-.1933	-.1067	-.0039
270.000		.8076							.5037						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25+AT11 EXTERNAL TANK (RB1T40)

ALPHAT(5) = 8.120 BETAT (1) = -8.220

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0478	-.0431	.0051
30.000	.0209	.0461	.0636
60.000	.0504	.1368	.1433
90.000	.1091	.1152	
120.000	.1156	.2434	.6047
135.000	.1537	.3553	.5867
150.000	.1350	.3631	.5722
165.000	.1335	.3416	.5957
180.000	.1343	.2935	.3588

ALPHAT(5) = 8.100 BETAT (2) = -4.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3020	1.2460	.8459	.3657	.0023	-.0340	-.1112	-.0973	-.0693	.1978	.1818	.0369	-.0243	-.0082	.0120
30.000			.8758	.3897	.0550	-.0124	-.0936	-.0789	.0299	.1928	.0410	-.0020	.0367	.0309	.0278
60.000			8272	.3485	.0223	-.0434	-.1317	-.1101	.4250	.1930	-.1943	-.0218	.0849	.0550	.0215
90.000		1.1160	.7175	.2626	-.0544	-.1156	-.1906	-.1395	.5949		-.3009	-.0786	.0003	.0210	.0433
120.000			5934	.1565	-.1342	-.1893	-.2560	-.2125	.0996	-.2784	-.3231	-.2538	-.0311	.0393	.0826
135.000								-.2542		-.1711		-.2650		.0135	
150.000			.5160	.0816	-.1216	-.2320	-.2960	-.2661	-.0524	.0107	.0791	-.1739	-.2097	-.0664	.0619
165.000				.0475	-.2072	-.2533	-.3086	-.2593	-.0638	.2118	.2571	.1187	-.2690	-.0863	.0669
180.000	1.3020	.8699	.4566	.0348	-.2158	-.2580	-.3126	-.2525	-.0025	.1582	.3347	-.0035	-.1754	-.0413	.0391
285.000		.9163							.5774						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0191	.0160	.0707
30.000	.0100	.0494	.0859
60.000	.0077	.0879	.0985
90.000	.02 3	.0714	
120.000	.0581	.2248	.4926
135.000	.0799	.3082	.4736
150.000	.0694	.3150	.4435
165.000	.0915	.3157	.4984
180.000	.1032	.2756	.3155

ARC11-716 IA14 C1+T12+S12N25+AT11 EXTERNAL TANK (RB1T40)

ALPHAT(5) = 8.040 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3200	1.2620	.8547	.3737	.0366	-.0288	-.1103	-.0921	-.0582	.1378	.2405	.0554	-.0274	-.0146	.0301
30.000			.8173	.3398	.0125	-.0558	-.1334	-.1106	-.0612	.2265	.1256	-.0019	-.0231	.0029	.0081
60.000			.7238	.2607	-.0517	-.1108	-.1846	-.1460	.3451	.2265	-.1726	-.0317	.0577	.0262	.0026
90.000		1.0140	.6128	.1672	-.1188	-.1743	-.2395	-.2139	.5868		-.2948	-.1281	.0252	.0041	.0223
120.000			.5236	.0961	-.1743	-.2236	-.2771	-.2359	.1174	-.2340	-.3085	-.2570	-.0256	.0008	.0451
135.000								-.2479		-.0014		-.2514		-.0252	
150.000			.4859	.0584	-.1981	-.2444	-.2994	-.2525	.0610	.0945	.1236	-.2090	-.2420	-.0790	.0221
165.000				.0471	-.2058	-.2521	-.3067	-.2695	.0663	.1493	.3117	.0859	-.1235	-.1087	.0616
180.000	1.3200	.8694	.4637	.0421	-.2068	-.2543	-.3054	-.2575	.0555	.1461	.3467	-.0214	-.0881	-.1706	.0639
270.000		1.0290							.5923						

X/LT	.7460	.8530	.9280
PHI			
.000	.0071	.0320	.0903
30.000	.0074	.0535	.1003
60.000	.0094	.0757	.1068
90.000	.0334	.0987	
120.000	.0651	.1877	.2838
135.000	.0709	.2364	.2641
150.000	.0513	.2334	.1795
165.000	.0940	.2449	.3653
180.000	.1022	.2419	.2557

ALPHAT(5) = 8.150 BETAT (4) = 8.300

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2560	1.1980	.8199	.3512	.0258	-.0412	-.1229	-.1062	-.0788	.0603	.0843	-.0012	-.0272	-.0277	-.0262
30.000			.6579	.2151	-.0880	-.1469	-.2139	-.1987	-.1616	.2098	.0845	-.0427	-.0641	-.0643	-.0697
60.000			.5125	.0891	-.1810	-.2310	-.2930	-.2418	.1277	.2805	-.0297	.0208	-.0357	-.0481	-.0538
90.000		.8060	.4237	.0162	-.2285	-.2745	-.2637	-.2569	.5391		-.3106	-.2984	-.0159	-.0956	-.0409
120.000			.3841	-.0117	-.2416	-.2820	-.2744	-.2732	.0331	-.1173	-.2881	-.2280	-.0757	-.0629	-.0267
135.000								-.2642		.1005		-.1911		-.0752	
150.000			.3831	-.0125	-.2397	-.2792	-.3296	-.2767	.0303	.1555	.0988	-.3009	-.2317	-.1087	-.0981
165.000				.0052	-.2337	-.2768	-.3286	-.3043	.0338	.1488	.2118	-.0992	-.1747	-.0755	-.0377
180.000	1.2560	.7754	.4301	.0184	-.2221	-.2695	-.3259	-.3143	.0033	.1078	.1545	-.0850	-.1350	-.0810	-.0499
270.000		1.2190							.6171						

X/LT	.7460	.8530	.9280
PHI			

DATE 06 JAN 75 TABULATED PRESSURE DATA - IA14A - VOL. 9

ARC11-716 IA14 C1+T12+S12N25+AT11 EXTERNAL TANK (RB1T40)

ALPHAT(5) = 0.150 BETAT (4) = 0.300

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0487	-.0495	.0108
30.000	-.0823	-.0272	.0459
60.000	-.0132	.0160	.1355
90.000	.0078	.0954	
120.000	.0438	.1333	.1435
135.000	.0291	.1390	.1218
150.000	.0125	.1146	-.0495
165.000	.0380	.1216	.3079
180.000	.0108	.1365	.0734

AHC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T41) (14 FEB 74)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES
LREF = 36.7090 INCHES YMRP = .0000 INCHES
BREF = 36.7090 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = .600 ELEVON = .000
RUDDER = .000 SPOBRK = .000

ALPHAT(1) = -8.260 BETAT (1) = -.010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0050	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5590	.6380
PHI															
.000	.9309	.4648	.0488	-.3430	-.3999	-.3640	-.2491	-.1352	-.0986	-.1282	-.1290	-.0958	-.0602	-.0481	-.0444
30.000			.0606	-.3279	-.4007	-.3637	-.2497	-.1452	-.1274	-.1847	-.2106	-.1139	-.0719	-.0719	-.[illegible]7
60.000			.1197	-.2892	-.3589	-.3206	-.2253	-.1402	-.2134	-.3691	-.3288	-.1192	-.0541	-.0582	-.0565
90.000		.6345	.2252	-.1900	-.2819	-.2240	-.0812	.0703	.0970		-.6524	-.3983	-.1660	-.1120	-.0924
120.000			.3605	-.0682	-.2093	-.1824	-.0527	.0914	.2023	.0131	-.0558	-.0830	-.0814	-.0368	-.0433
135.000								.0626		.0824		-.0895		-.0791	
150.000			.4583	.0216	-.1633	-.1505	-.0840	.0581	.1371	.1835	-.1308	-.1438	-.1921	-.1683	-.1659
165.000				.0612	-.1394	-.1305	-.0483	.0596	.1425	.2303	.0115	-.1183	-.1476	-.1152	-.0712
180.000	.9309	.9280	.5295	.0703	-.1311	-.1246	-.0346	.0638	.1514	.2229	.0633	-.1266	-.1526	-.1060	-.0611
270.000		.6328							.0919						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0600	-.1192	-.4582
30.000	-.0700	-.1150	-.4404
60.000	-.0589	-.0943	-.3131
90.000	-.1059	-.1209	
120.000	-.0709	-.1914	-.3602
135.000	-.0801	-.2183	-.3835
150.000	-.1775	-.3296	-.2944
165.000	-.0875	-.2405	-.4209
180.000	-.0822	-.2266	-.4274

ALPHAT(1) = -8.270 BETAT (2) = 4.070

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0050	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5590	.6380
PHI															
.000	.9049	.4398	.0398	-.3491	-.4109	-.3748	-.2584	-.1475	-.1120	-.1389	-.1454	-.1127	-.0767	-.0685	-.0683
30.000			.0301	-.3544	-.3955	-.3620	-.2246	-.1129	-.0892	-.1537	-.1951	-.1109	-.0541	-.0544	-.0521
60.000			.0439	-.3323	-.3604	-.3048	-.1897	-.0923	-.1548	-.3193	-.[illegible]116	-.1186	-.0461	-.0517	-.0486
90.000		.5146	.1061	-.2800	-.3158	-.2481	-.0908	.0721	.1157		-.[illegible]410	-.3670	-.1480	-.0952	-.0710
120.000			.2349	-.1798	-.2771	-.2345	-.1014	.0587	.1893	-.0017	-.0927	-.1215	-.1058	-.0837	-.0709
135.000								.0221		.0376		-.1371		-.1232	
150.000			.3539	-.0711	.2278	-.2108	-.1203	.0100	.0955	.1100	-.2871	-.3688	-.3148	-.2521	-.1954

ARC11-716 IA14 OL+T12+S12M25 EXTERNAL TANK (RB1T41)

ALPHAT(1) = -8.270 BETAT (2) = 4.070

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
165.000				.0119	-.1729	-.1667	-.0814	.0209	.1097	.1852	-.0459	-.1557	-.1672	-.1241	-.1028
180.000	.9049	.9202	.5155	.0627	-.1348	-.1347	-.0454	.0499	.1372	.1999	.0517	-.1324	-.1633	-.1483	-.1022
270.000		.7390							.0772						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0738	-.1319	-.4598
30.000	-.0664	-.1155	-.4518
60.000	-.0644	-.0940	-.3338
90.000	-.0839	-.1205	
120.000	-.1004	-.2202	-.3747
135.000	-.1149	-.2443	-.3679
150.000	-.2352	-.3637	-.3305
165.000	-.1184	-.2572	-.3844
180.000	-.1261	-.2573	-.4377

ALPHAT(1) = -8.290 BETAT (3) = 8.170

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.8392	.8761	-.0020	-.3865	-.4481	-.4040	-.2955	-.1890	-.1489	-.1705	-.1750	-.1405	-.1120	-.0982	-.0986
30.000			-.0368	-.3894	-.3976	-.3427	-.2143	-.1004	-.0752	-.1415	-.1833	-.1111	-.0710	-.0705	-.0747
60.000			-.0329	-.3791	-.3548	-.2955	-.1619	-.0588	-.1014	-.2853	-.6223	-.1229	-.0569	-.0580	-.0626
90.000		.3887	.0010	-.3556	-.3393	-.2565	-.0895	.0762	.1355		-.6409	-.3193	-.1224	-.0780	-.0667
120.000			.1047	-.2801	-.3434	-.2885	-.1436	.0284	.1750	-.0237	-.1250	-.1595	-.1519	-.1376	-.1291
135.000								-.0318		-.0190		-.2221		-.1872	
150.000			.2469	-.1673	-.3026	-.2756	-.1787	-.0560	.0393	.0186	-.3828	-.4997	-.4473	-.3218	-.2648
165.000				-.0568	-.2375	-.2202	-.1388	-.0353	.0487	.0946	-.1298	-.2209	-.2410	-.2270	-.1654
180.000	.8392	.8045	.4784	.0265	-.1762	-.1656	-.0809	.0089	.0958	.1446	.0139	-.1799	-.2738	-.2362	-.1816
270.000		.8265							.0760						

X/LT	.7460	.8530	.9280
PHI			
.000	-.1076	-.1572	-.5069
30.000	-.0999	-.1448	-.4664
60.000	-.0775	-.1098	-.3437
90.000	-.0866	-.1648	
120.000	-.1477	-.2508	-.3796
135.000	-.1539	-.2690	-.3925
150.000	-.2087	-.4162	-.3734

ARC11-716 IA14 01+T12+S12N25 EXTERNAL TANK (RB1T41)

ALPHAT(1) = -8.250 BETAT (3) = 8.170

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
165.000	-.1742	-.2893	-.4152
180.000	-.2096	-.3243	-.4616

ALPHAT(2) = -4.310 BETAT (1) = -8.130

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	.9196	.5164	.1249	-.2968	-.4073	-.3833	-.2808	-.1761	-.1377	-.1582	-.1451	-.1292	-.1121	-.1012	-.0956
30.000			.2326	-.2036	-.3790	-.3651	-.2808	-.1917	-.1964	-.2380	-.1873	-.1419	-.1257	-.1095	-.0970
60.000			.3705	-.0825	-.2690	-.2551	-.1787	-.1011	-.1988	-.4235	-.4021	-.0811	-.0525	-.0498	-.0510
90.000		.8905	.4937	.0378	-.1325	-.1069	.0108	.1415	.2022		-.1258	-.0046	-.0274	-.0439	-.0448
120.000			.5428	.0904	-.1068	-.0933	.0052	.1160	.1520	-.0293	.0412	.0379	.0065	-.0019	.0095
135.000								.0712		.1040		.0335		-.0152	
150.000			.5055	.0522	-.1437	-.1355	-.0639	.0452	.1025	.2363	.1127	-.0406	-.1419	-.1310	-.0862
165.000				-.0096	-.1953	-.1903	-.1032	.0030	.0879	.2062	.0896	-.0309	-.1210	-.1171	-.0522
180.000	.9196	.8199	.3741	-.0665	-.2330	-.2168	-.1167	-.0144	.0692	.1715	.0216	-.1440	-.1773	-.1579	-.1036
270.000		.4632							.2441						

X/LT	.7460	.8530	.9280
PHI			
.000	-.1060	-.1632	-.5183
30.000	-.0983	-.1358	-.4971
60.000	-.0649	-.0852	-.2659
90.000	-.0750	-.1158	
120.000	.0145	-.0669	-.3003
135.000	.0113	-.0913	-.3942
150.000	-.0701	-.1882	-.1858
165.000	-.0333	-.1529	-.4342
180.000	-.0725	-.1788	-.4542

ARC11-716 IA14 OL+T12+S12N25 EXTERNAL TANK (RB1T41)

ALPHAT(2) = -4.290 BETAT (2) = -4.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9818	.5770	.1566	-.2711	-.3644	-.3574	-.2487	-.1404	-.1061	-.1245	-.1161	-.0968	-.0723	-.0654	-.0370
30.000			.2101	-.2241	-.3656	-.3483	-.2473	-.1534	-.1427	-.1995	-.1556	-.1095	-.0990	-.0860	-.0681
60.000			.2956	-.1465	-.2902	-.2685	-.1758	-.0870	-.1657	-.4089	-.4011	-.1124	-.0615	-.0521	-.0478
90.000		.8035	.3854	-.0615	-.1993	-.1545	-.0198	.1315	.1991		-.1402	-.0183	-.0412	-.0499	-.0428
120.000			.4477	-.0015	-.1631	-.1400	-.0301	.0967	.1486	-.0511	-.0014	-.0053	-.0423	-.0428	-.0285
135.000								.0601		.0808		-.0363		-.0549	
150.000			.4580	.0067	-.1769	-.1612	-.0726	.0394	.1062	.2090	.0549	-.0304	-.1412	-.1428	-.1005
165.000				-.0185	-.1946	-.1804	-.0894	.0202	.1068	.2132	.0757	-.0717	-.1374	-.1083	-.0542
180.000	.9818	.8399	.4083	-.0474	-.2069	-.1963	-.0932	.0188	.0997	.1052	.0582	-.1269	-.1516	-.1289	-.0792
270.000		.5894							.2218						

X/LT	.7480	.8530	.9290
PHI			
.000	-.0674	-.1224	-.4758
30.000	-.0707	-.1074	-.4733
60.000	-.0562	-.0771	-.2795
90.000	-.0524	-.0703	
120.000	-.0273	-.1053	-.3217
135.000	-.0255	-.1347	-.3825
150.000	-.0977	-.2245	-.1994
165.000	-.0468	-.1706	-.3976
180.000	-.0618	-.1862	-.4230

ALPHAT(2) = -4.290 BETAT (2) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9999	.5904	.1583	-.2635	-.3703	-.3476	-.2391	-.1302	-.0953	-.1120	-.1034	-.0820	-.0611	-.0548	-.0468
30.000			.1795	-.2515	-.3591	-.3322	-.2241	-.1231	-.1062	-.1621	-.1342	-.0939	-.0702	-.0631	-.0539
60.000			.2133	-.2170	-.3098	-.2742	-.1698	-.0640	-.1290	-.3812	-.3907	-.1373	-.0723	-.0498	-.0471
90.000		.6967	.2704	-.1587	-.2465	-.1911	-.0418	.1228	.2064		-.1043	-.0268	-.0486	-.0557	-.0480
120.000			.3414	-.0952	-.2202	-.1831	-.0566	.0779	.1479	-.0613	-.0384	-.0545	-.0785	-.0696	-.0459
135.000								.0451		.0496		-.0847		-.0823	
150.000			.3947	-.0531	-.2138	-.1931	-.0921	.0273	.1000	.1644	-.1209	-.1069	-.1903	-.1724	-.1482
165.000				-.0366	-.2026	-.1908	-.0903	.0205	.1065	.2041	.0179	-.1089	-.1450	-.1192	-.0711
180.000	.9999	.8415	.4170	-.0381	-.2017	-.1884	-.0817	.0262	.1154	.1973	.0630	-.1211	-.1497	-.1095	-.0575
270.000		.6958							.2005						

X/LT	.7480	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1Y41)

ALPHAT(2) = -4.290 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0539	-.1100	-.4655
30.000	-.0590	-.0997	-.4561
60.000	-.0533	-.0770	-.3159
90.000	-.0510	-.0790	
120.000	-.0474	-.1362	-.3209
135.000	-.0539	-.1621	-.3459
150.000	-.1380	-.2632	-.2534
165.000	-.0670	-.1842	-.3719
180.000	-.0578	-.1768	-.3898

ALPHAT(2) = -4.180 BETAT (4) = 4.070

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9789	.5735	.1538	-.2720	-.3834	-.3587	-.2515	-.1419	-.1082	-.1279	-.1109	-.0926	-.0799	-.0663	-.0591
30.000			.1225	-.2884	-.3670	-.3276	-.2179	-.1051	-.0811	-.1417	-.1262	-.0897	-.0719	-.0607	-.0553
60.000			.1213	-.2790	-.3272	-.2738	-.1531	-.0368	-.0806	-.3431	-.3548	-.1470	-.0866	-.0643	-.0529
90.000		.5826	.1519	-.2462	-.2812	-.2123	-.0468	.1264	.2296		-.1168	-.0258	-.0499	-.0629	-.0603
120.000			.2222	-.1926	-.2733	-.2293	-.0860	.0616	.1486	-.0735	-.0714	-.0835	-.0987	-.0850	-.0655
135.000								.0192		.0121		-.1153		-.1174	
150.000			.3060	-.1293	-.2633	-.2354	-.1251	.0036	.0803	.1066	-.2463	-.3180	-.3308	-.2484	-.1754
165.000				-.0801	-.2381	-.2164	-.1204	-.0046	.0842	.1660	-.0401	-.1538	-.1624	-.1206	-.0919
180.000	.9789	.8375	.4073	-.0485	-.2176	-.1989	-.0945	.0042	.1007	.1740	.0519	-.1323	-.1592	-.1515	-.0969
270.000		.8044							1949						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0714	-.1223	-.4757
30.000	-.0570	-.1038	-.4513
60.000	-.0528	-.0782	-.3244
90.000	-.0593	-.0985	
120.000	-.0737	-.1672	-.3265
135.000	-.0908	-.1886	-.3464
150.000	-.1824	-.3010	-.2936
165.000	-.0906	-.2024	-.3578
180.000	-.0947	-.2104	-.4203

ARC11-716 IA14 OL+T12+S12N25 EXTERNAL TANK (RB1T41)

ALPHAT(2) = -4.190 BETAT (5) = 8.140

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	.9117	.5062	.1138	-.3067	-.4163	-.3905	-.2851	-.1822	-.1443	-.1587	-.1461	-.1322	-.1148	-.1022	-.0980
30.000			.0408	-.3387	-.3911	-.3466	-.2195	-.1063	-.0710	-.1378	-.1290	-.1016	-.0860	-.0786	-.0753
60.000			.0273	-.3325	-.3364	-.2725	-.1366	-.0168	-.0396	-.3100	-.3165	-.1566	-.0952	-.0702	-.0653
90.000		.4569	.0427	-.3149	-.3047	-.2198	-.0430	.1345	.2476		-.0745	-.0398	-.0699	-.0892	-.0862
120.000			.1066	-.2772	-.3194	-.2620	-.1095	.0472	.1467	-.0877	-.0981	-.1157	-.1343	-.1271	-.1195
135.000								-.0125		-.0249		-.1837		-.1704	
150.000			.1965	-.2156	-.3168	-.2798	-.1722	-.0381	.0439	.0344	-.3545	-.4410	-.4064	-.3031	-.2413
165.000				-.1408	-.2857	-.2561	-.1590	-.0507	.0359	.0850	-.1181	-.2058	-.2270	-.2101	-.1501
180.000	.9117	.7289	.3673	-.0813	-.2436	-.2219	-.1248	-.0310	.0630	.1130	.0125	-.1722	-.2585	-.2310	-.1666
270.000		.8927							.1869						

X/LT	.7460	.8530	.9280
PHI			
.000	-.1145	-.1660	-.5135
30.000	-.0813	-.1208	-.4332
60.000	-.0648	-.0924	-.3180
90.000	-.1042	-.1704	
120.000	-.1204	-.1960	-.3218
135.000	-.1207	-.2159	-.3664
150.000	-.2429	-.3506	-.3467
165.000	-.1370	-.2359	-.4042
180.000	-.1693	-.2781	-.4681

ALPHAT(3) = -.480 BETAT (1) = -8.150

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9416	.6210	.2287	-.2184	-.3693	-.3497	-.2608	-.1561	-.1221	-.1368	-.1264	-.1163	-.1075	-.1007	-.0951
30.000			.3436	-.1110	-.3092	-.2971	-.2195	-.1364	-.1322	-.1815	-.1388	-.1078	-.0948	-.0898	-.0771
60.000			.4535	-.0069	-.1955	-.1844	-.1060	-.0195	-.0794	-.3285	-.2291	-.1081	-.0430	-.0271	-.0184
90.000		.9140	.5107	.0547	-.1213	-.0896	.0283	.1661	.2447		-.1559	.0005	-.0197	-.0234	-.0178
120.000			.4817	.0315	-.1486	-.1367	-.0449	.0572	.0669	-.1140	.0227	.0365	-.0032	-.0089	.0077
135.000								.0107		.0532		.0253		-.0201	
150.000			.4063	-.0392	-.2181	-.2055	-.1263	-.0135	.0410	.1975	.0824	-.0511	-.1393	-.1166	-.0751
165.000				-.1075	-.2658	-.2476	-.1517	-.0406	.0437	.1736	.0697	-.0210	-.1181	-.1122	-.0444
180.000	.9416	.7241	.2686	-.1585	-.2908	-.2634	-.1493	-.0367	.0372	.1524	.0216	-.1382	-.1687	-.1509	-.0901
270.000		.4852							.2943						

X/LT	.7460	.8530	.9280

(1

ARC11-716 IA14 OL+T12+S12N25 EXTERNAL TANK (RB1T41)

ALPHAT(3) = -.480 BETAT (1) = -8.150

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9290
PHI			
.000	-.1039	-.1592	-.5061
30.000	-.0795	-.1142	-.4791
60.000	-.0247	-.0374	-.2512
90.000	-.0132	-.0297	
120.000	.0310	-.0282	-.3014
135.000	.0366	-.0494	-.3793
150.000	-.0400	-.1615	-.1893
165.000	-.0035	-.1182	-.4345
180.000	-.0421	-.1449	-.4597

ALPHAT(3) = -.480 BETAT (2) = -4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.0060	.6855	.2643	-.1901	-.3390	-.3211	-.2262	-.1204	-.0868	-.1013	-.0957	-.0800	-.0641	-.0588	-.0521
30.000			.3155	-.1362	-.3115	-.2945	-.2039	-.1051	-.0927	-.1512	-.1161	-.0809	-.0691	-.0612	-.0539
60.000			.3735	-.0882	-.2379	-.2183	-.1204	-.0153	-.0565	-.3230	-.2223	-.1285	-.0647	-.0455	-.0315
90.000		.8241	.3990	-.0492	-.1863	-.1447	-.0044	.1562	.2506		-.1769	-.0306	-.0524	-.0521	-.0315
120.000			.3946	-.0512	-.2007	-.1775	-.0633	.0517	.0691	-.1255	-.0154	-.0094	-.0483	-.0460	-.0318
135.000								.0117		.0398		-.0397		-.0610	
150.000			.3618	-.0811	-.2344	-.2153	-.1215	-.0044	.0557	.1764	.0799	-.0547	-.1488	-.1396	-.0866
165.000				-.1116	-.2608	-.2364	-.1318	-.0192	.0684	.1853	.0731	-.0691	-.1[illegible]	-.1031	-.0465
180.000	1.0060	.7405	.2994	-.1397	-.2666	-.2423	-.1286	-.0115	.0734	.1717	.0539	-.1180	-.1496	-.1145	-.0707
270.000		.6105							.2709						

X/LT	.7460	.8530	.9260
PHI			
.000	-.0616	-.1145	-.4769
30.000	-.0551	-.0930	-.4579
60.000	-.0330	-.0467	-.2797
90.000	-.0192	-.0296	
120.000	-.0062	-.0684	-.3032
135.000	-.0039	-.0863	-.3742
150.000	-.0622	-.1817	-.2025
165.000	-.0158	-.1329	-.4253
180.000	-.0346	-.1500	-.4402

ARC11-716 IA14 CX+T12+S12N25 EXTERNAL TANK (RB1741)

ALPHAT(3) = -.470 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0000	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.0280	.7040	.2729	-.1784	-.3300	-.3106	-.2177	-.1121	-.0745	-.0939	-.0825	-.0710	-.0577	-.0443	.0418
30.000			.2753	-.1749	-.3189	-.2931	-.1929	-.0905	-.0678	-.1295	-.1034	-.0789	-.0564	-.0517	-.0427
60.000			.2719	-.1646	-.2773	-.2358	-.1257	-.0056	-.0337	-.3102	-.2183	-.1281	-.0767	-.0570	-.0490
90.000		.7207	.2852	-.1482	-.2361	-.1739	-.0247	.1459	.2585		-.1744	-.0495	-.0732	-.0694	-.0474
120.000			.3025	-.1330	-.2434	-.2031	-.0789	.0542	.0844	-.1319	-.0483	-.0340	-.0811	-.0735	-.0431
135.000								.0171		.0194		-.0869		-.08 2	
150.000			.3095	-.1272	-.2575	-.2291	-.1254	.0033	.0551	.1403	-.1159	-.0945	-.1 11.	-.1706	-.1310
165.000				-.1291	-.2619	-.2361	-.1301	-.0096	.0763	.1845	.0142	-.1033	-.1390	-.1224	-.0813
180.000	1.0280	.7409	.3107	-.1312	-.2689	-.2364	-.1234	-.0085	.0837	.1782	.0607	-.1142	-.1405	-.1056	-.0508
270.000		.7290							.2530						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0487	-.0995	-.4508
30.000	-.0461	-.0904	-.4461
60.000	-.0443	-.0637	-.3106
90.000	-.0246	-.0440	
120.000	-.0273	-.0866	-.2845
135.000	-.0261	-.1110	-.3288
150.000	-.0978	-.2076	-.2328
165.000	-.0320	-.1317	-.3699
180.000	-.0273	-.1299	-.3657

ALPHAT(3) = -.480 BETAT (4) = 4.060

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.0090	.6759	.2560	-.1907	-.3371	-.3307	-.2284	-.1220	-.0887	-.1016	-.0982	-.0833	-.0688	-.0589	-.0544
30.000			.2022	-.2298	-.3429	-.3187	-.2011	-.0880	-.0568	-.1205	-.1065	-.0809	-.0683	-.0600	-.0526
60.000			.1766	-.2442	-.2983	-.2575	-.1252	.0079	-.0027	-.2788	-.1927	-.1263	-.0813	-.0550	-.0429
90.000		.8057	.1651	-.2383	-.2695	-.2008	-.0260	.1575	.2815		-.1432	-.0644	-.0880	-.0812	-.0559
120.000			.1845	-.2180	-.2777	-.2293	-.0836	.0466	.1004	-.1268	-.0745	-.0765	-.1026	-.0871	-.0666
135.000								.0076		-.0022		-.1134		-.1093	
150.000			.2304	-.1895	-.2886	-.2558	-.1382	-.0119	.0805	.0984	-.2297	-.2742	-.3212	-.2510	-.1585
165.000				-.1585	-.2824	-.2958	-.1382	-.0273	.0656	.1524	-.0419	-.1455	-.1528	-.1137	-.0902
180.000	1.0090	.7529	.3039	-.1377	-.2713	-.2478	-.1332	-.0246	.0768	.1551	.0526	-.1190	-.1566	-.1477	-.0864
270.000		.8361							.2451						

X/LT	.7480	.8530	.9280
PHI			

ARC11-716 IA14 OI+T12+S12N25 EXTERNAL TANK (RB1T41)

ALPHAT(3) = -.460 BETAT (4) = 4.060

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0621	-.1123	-.4669
30.000	-.0574	-.0919	-.4427
60.000	-.0509	-.0681	-.3026
90.000	-.0497	-.0754	
120.000	-.0601	-.1270	-.3150
135.000	-.0618	-.1476	-.3481
150.000	-.1489	-.2625	-.2908
165.000	-.0651	-.1729	-.3684
180.000	-.0675	-.1870	-.4339

ALPHAT(3) = -.470 BETAT (5) = 8.180

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9330	.6093	.2116	-.2243	-.3743	-.3575	-.2733	-.1682	-.1296	-.1503	-.1389	-.1258	-.1145	-.1092	-.1029
30.000			.1086	-.2914	-.3775	-.3442	-.2271	-.1092	-.0678	-.1280	-.1250	-.1044	-.0691	-.0849	-.0780
60.000			.0682	-.3167	-.3303	-.2686	-.1240	.0127	.0174	-.2622	-.1771	-.1302	-.0903	-.0725	-.0638
90.000		.4768	.0556	-.3164	-.2935	-.2071	-.0261	.1606	.2996		-.1555	-.0875	-.1124	-.1065	-.0923
120.000			.0757	-.2967	-.3118	-.2457	-.0932	.0538	.1055	-.1429	-.1102	-.1163	-.1397	-.1323	-.1124
135.000								-.0066		-.0339		-.1628		-.1587	
150.000			.1351	-.2673	-.3346	-.2845	-.1628	-.0344	.0409	.0418	-.3616	-.3769	-.3940	-.2749	-.2180
165.000				-.2171	-.3277	-.2936	-.1800	-.0648	.0210	.0864	-.1075	-.2067	-.2231	-.2055	-.1402
180.000	.9330	.6267	.2626	-.1743	-.3035	-.2757	-.1616	-.0592	.0347	.0955	.0061	-.1726	-.2600	-.2289	-.1601
270.000		.9236							.2407						

X/LT	.7460	.8390	.9280
PHI			
.000	-.1148	-.1620	-.5103
30.000	-.0749	-.1138	-.4408
60.000	-.0722	-.0961	-.3051
90.000	-.1059	-.1416	
120.000	-.0953	-.1505	-.3031
135.000	-.0997	-.1756	-.3623
150.000	-.2022	-.2998	-.3379
165.000	-.1176	-.1987	-.4036
180.000	-.1454	-.2462	-.4883

ARC11-716 IA14 OL+T12+S12NBS EXTERNAL TANK (RB1T41)

ALPHAT(4) = 4.090 BETAT (1) = -8.170

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	.9228	.7328	.3514	-.1074	-.3029	-.2990	-.2.[illegible]	-.1247	-.0828	-.0986	-.0929	-.0935	-.0903	-.0867	-.0885
30.000			.4755	.0113	-.2175	-.2172	.1459	-.0591	-.0491	-.1015	-.0691	-.0580	-.0553	-.0520	-.0483
60.000			.5393	.0753	-.1300	-.1228	-.0406	.0646	.0492	-.2051	-.0544	-.0259	-.0350	-.0291	-.0162
90.000		.9002	.5042	.0487	-.1274	-.0965	.0220	.1554	.2297		-.2542	-.0459	-.0274	-.0115	.0026
120.000			.3876	-.0489	-.2227	-.2090	-.1203	-.0403	-.0661	-.2121	-.1129	.0020	-.0018	-.0001	.0258
135.000								.0820		-.0224		.0123		-.0112	
150.000			.2727	-.1603	-.3055	-.2867	-.2046	-.0963	-.0430	.1399	.0405	-.0553	-.1275	-.1032	-.0573
165.000				-.2286	-.3459	-.3160	-.2055	-.0922	-.0051	.1347	.0469	-.0177	-.1037	-.0985	-.0142
180.000	.9228	.5914	.1408	-.2660	-.3503	-.3125	-.1840	-.0611	.0137	.1227	.0108	-.1382	-.1594	-.1344	-.0617
270.000		.4603							.2828						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0969	-.1486	-.4942
30.000	-.0488	-.0871	-.4418
60.000	-.0104	-.0144	-.2274
90.000	.0126	-.0171	
120.000	0718	.0351	-.2552
135.000	.0745	.0110	-.3418
150.000	.0011	-.1120	-.1493
165.000	.0398	-.0706	-.4035
180.000	-.0027	-.1025	-.[illegible]990

ALPHAT(4) = 4.100 BETAT (2) = -4.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	.9071	.8065	.3988	-.0699	-.2680	-.2617	-.1841	-.0835	-.0433	-.0585	-.0526	-.0480	-.0492	-.0424	-.0409
30.000			.4488	-.0226	-.2305	-.2179	-.1435	-.0447	-.0186	-.0775	-.0499	-.0388	-.0356	-.0392	-.0323
60.000			.4453	-.0176	-.1892	-.1665	-.0640	.0564	.0613	-.2029	-.0612	-.0300	-.0359	-.0421	-.0270
90.000		.8047	.3911	-.0552	-.1963	-.1506	-.0177	.1401	.2314		-.2154	-.0790	-.0622	-.0379	-.0155
120.000			.3083	-.1310	-.2586	-.2267	-.12[illegible]4	-.0253	-.0457	-.2180	-.1430	-.0548	-.0516	-.0409	-.0088
135.000								-.0525		-.0190		-.0622		-.0453	
150.000			.2[illegible]	-.1692	-.3081	-.2797	-.1790	-.0619	-.0060	.1242	.0571	-.1157	-.1282	-.1204	-.0566
165.000				-.2235	-.3238	-.2917	-.1743	-.0584	.0317	.1587	.0550	-.0642	-.1017	-.0802	-.0150
180.000	.9071	.8073	.1633	-.2474	-.3256	-.2885	-.1583	-.0321	.0530	.1375	.0500	-.1053	-.1299	-.0929	-.0415
270.000		.5648							.2576						

X/LT	.7403	.8534	.9280
PHI			

ARC11-716 IA14 OL+T12+S12N25 EXTERNAL TANK (RB1T41)

ALPHAT(4) = 4.100 BETAT (2) = -4.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0477	-.1000	-.4571
30.000	-.0336	-.0682	-.4207
60.000	-.0256	-.0299	-.2353
90.000	.0036	-.0048	
120.000	.0318	-.0054	-.2747
135.000	.0348	-.0258	-.3546
150.000	-.0116	-.1342	-.1807
165.000	.0249	-.0875	-.4209
180.000	.0102	-.0966	-.4397

ALPHAT(4) = 4.110 BETAT (3) = .030

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0080	.8233	.4036	-.0635	-.2594	-.2532	-.1738	-.0700	-.0276	-.0469	-.0409	-.0377	-.0294	-.0321	-.0244
30.000			.3851	-.0768	-.2564	-.2446	-.1541	-.0475	-.0143	-.0700	-.0546	-.0410	-.0362	-.0395	-.0321
60.000			.3388	-.1130	-.2408	-.2098	-.0937	.0423	.0683	-.1978	-.0717	-.0374	-.0466	-.0463	-.0409
90.000		.7016	.2716	-.1534	-.2440	-.1862	-.0356	.1361	.2407		-.1946	-.0815	-.0836	-.0551	-.0258
120.000			.2209	-.1952	-.2812	-.2408	-.1206	-.0066	-.0155	-.2052	-.1525	-.1031	-.0907	-.0690	-.0276
135.000								-.0303		-.0229		-.1043		-.0673	
150.000			.1956	-.2215	-.3098	-.2703	-.1573	-.0392	.0189	.1106	-.1206	-.1073	-.1479	-.1401	-.1075
165.000				-.2328	-.3190	-.2818	-.1567	-.0427	.0458	.1571	.0141	-.0966	-.1147	-.0939	-.0362
180.000	1.0080	.6129	.1776	-.2432	-.3190	-.2827	-.1523	-.0359	.0559	.1538	.0618	-.1037	-.1268	-.0824	-.0238
270.000		.7051							.2429						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0329	-.0831	-.4435
30.000	-.0312	-.0671	-.4208
60.000	-.0392	-.0473	-.2740
90.000	-.0131	-.0164	
120.000	.0082	-.0376	-.2619
135.000	.0100	-.0535	-.3065
150.000	-.0577	-.1504	-.2038
165.000	.0043	-.0848	-.3473
180.000	.0138	-.0795	-.3549

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T41)

ALPHAT(4) = 4.100 BETAT (4) = 4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9892	.7949	.3820	-.0764	-.2755	-.2650	-.1865	-.0849	-.0475	-.0661	-.0544	-.0507	-.0456	-.0428	-.0403
30.000			.2974	-.1454	-.3026	-.2803	-.1829	-.0672	-.0227	-.0809	-.0665	-.0557	-.0517	-.0499	-.0492
60.000			.2173	-.2068	-.2873	-.2456	-.1109	.0376	.0813	-.1921	-.0796	-.0477	-.0484	-.0493	-.0465
90.000		.5901	.1610	-.2394	-.2764	-.2082	-.0383	.1406	.2623		-.1722	-.0790	-.0880	-.0677	-.0365
120.000			.1325	-.2567	-.2976	-.2456	-.1100	.0136	.0216	-.1906	-.1601	-.1333	-.1134	-.0902	-.0466
135.000								-.0139		-.0280		-.1327		-.0961	
150.000			.1389	-.2635	-.3214	-.2773	-.1545	-.0254	.0350	.0782	-.2149	-.2794	-.2906	-.2161	-.1222
165.000				-.2506	-.3287	-.2897	-.1643	-.0443	.0421	.1391	-.0379	-.1368	-.1385	-.0993	-.0614
180.000	.9892	.6215	.1715	-.2473	-.3305	-.2914	-.1652	-.0505	.0400	.1385	.0571	-.1076	-.1344	-.1282	-.0632
270.000		.8193							.2352						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0487	-.0984	-.4557
30.000	-.0487	-.0881	-.4360
60.000	-.0481	-.0678	-.3033
90.000	-.0218	-.0352	
120.000	-.0174	-.0760	-.2942
135.000	-.0286	-.1054	-.3325
150.000	-.1028	-.2039	-.2748
165.000	-.0293	-.1268	-.3466
180.000	-.0369	-.1424	-.4234

ALPHAT(4) = 4.100 BETAT (5) = 8.200

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9138	.7257	.3408	-.1095	-.3080	-.3016	-.2299	-.1252	-.0650	-.1101	-.0945	-.0941	-.0879	-.0930	-.0852
30.000			.1968	-.2262	-.3520	-.3300	-.2234	-.1042	-.0482	-.1015	-.0981	-.0908	-.0862	-.0862	-.0819
60.000			.0905	-.2963	-.3349	-.2753	-.1335	.0250	.0844	-.1765	-.0921	-.0633	-.0684	-.0645	-.0656
90.000		.4580	.0445	-.3226	-.2989	-.2145	-.0336	.1492	.2791		-.1025	-.0615	-.0826	-.0736	-.0570
120.000			.0380	-.3270	-.3125	-.2461	-.0997	.0301	.0488	-.1842	-.1856	-.1703	-.1470	-.1225	-.0841
135.000								-.0085		-.0488		-.1626		-.1462	
150.000			.0522	-.3193	-.3414	-.2869	-.1581	-.0286	.0283	.0431	-.3343	-.3653	-.3393	-.2549	-.1864
165.000				-.3018	-.3585	-.3111	-.1892	-.0723	.0090	.0897	-.0948	-.2014	-.2082	-.1954	-.1227
180.000	.9138	.5076	.1358	-.2768	-.3558	-.3214	-.1916	-.0868	.0081	.0894	.0058	-.1694	-.2509	-.2182	-.1390
270.000		.9022							.2301						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T41)

ALPHAT(4) = 4.100 BETAT (5) = 3.200

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0980	-.1449	-.4919
30.000	-.0793	-.1216	-.4446
60.000	-.0613	-.0758	-.2931
90.000	-.0527	-.0581	
120.000	-.0556	-.1083	-.3102
135.000	-.0657	-.1378	-.3546
150.000	-.1606	-.2614	-.3250
165.000	-.0844	-.1697	-.3827
180.000	-.1080	-.2147	-.4597

ALPHAT(5) = 8.040 BETAT (1) = -8.140

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.8639	.8205	.4583	-.0019	-.2294	-.2271	-.1622	-.0767	-.0416	-.0537	-.0547	-.0589	-.0600	-.0531	-.0597
30.000			.5865	.1174	-.1318	-.1392	-.0805	.0111	.0274	-.0295	-.0055	-.0045	-.0055	-.0128	-.0074
60.000			.5958	.1314	-.0828	-.0746	.0049	.1218	.1549	-.0847	.0066	.0375	.0286	.0195	.0187
90.000		.8390	.4665	.0280	-.1537	-.1214	-.0112	.1112	.1510		-.1159	.0572	.0080	.0005	.0220
120.000			.2783	-.1409	-.2977	-.2799	-.2107	-.1354	-.1846	-.2759	-.3946	-.0236	.0172	.0161	.0398
135.000								-.1631		-.0767		-.0193		-.0010	
150.000			.1482	-.2640	-.3789	-.3511	-.2636	-.1549	-.1020	.0966	.0010	-.0618	-.1053	-.0876	-.0392
165.000				-.3226	-.3944	-.3558	-.2377	-.1200	-.0284	.1112	.0358	-.0054	-.0742	-.0730	.0060
180.000	.8639	.4665	.0324	-.3462	-.3789	-.3257	-.1951	-.0659	.0076	.1132	.0131	-.1176	-.1365	-.1115	-.0343
270.000		.4026							.2012						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0663	-.1229	-.4652
30.000	-.0125	-.0502	-.4069
60.000	.0177	.0072	-.2159
90.000	.0524	.0201	
120.000	.0871	.0688	-.2375
135.000	.1006	.0603	-.3184
150.000	.0307	-.0766	-.1145
165.000	.0600	-.0371	-.3937
180.000	.0278	-.0711	-.4119

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T41)

ALPHAT(5) = 8.080 BETAT (2) = -4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9229	.8950	.5091	.0391	-.1926	-.1981	-.1272	-.0348	.0044	-.0118	-.0133	-.0139	-.0156	-.0124	-.0138
30.000			.5400	.0715	-.1555	-.1601	-.0833	.0083	.0417	-.0130	-.0029	.0050	.0027	-.0003	.0012
60.000			.4797	.0230	-.1544	-.1381	-.0372	.0945	.1448	-.0940	-.0180	.0198	.0101	.0065	-.0009
90.000		.7405	.3436	-.0831	-.2187	-.1772	-.0472	.0968	.1451		-.0710	.0390	-.0186	-.0257	-.0023
120.000			.2032	-.2026	-.3160	-.2894	-.1930	-.1135	-.1489	-.2710	-.3920	-.0696	-.0337	-.0224	.0074
135.000								-.1209		-.0567		-.0758		-.0351	
150.000			.1187	-.2800	-.3651	-.3297	-.2214	-.1108	-.0532	.0981	.0127	-.1296	-.1241	-.0986	-.0464
165.000				-.3090	-.3678	-.3226	-.1960	-.0783	.0112	.1338	.0491	-.0468	-.0830	-.0587	.0006
180.000	.9229	.4788	.0509	-.3257	-.3563	-.3055	-.1673	-.0449	.0384	.1423	.0604	-.0989	-.1076	-.0729	-.0186
270.000		.5276							.1756						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0219	-.0750	-.4404
30.000	.0012	-.0356	-.3906
60.000	.0050	-.0059	-.2239
90.000	.0287	.0171	
120.000	.0570	.0332	-.2389
135.000	.0609	.0076	-.3158
150.000	.0171	-.0945	-.1452
165.000	.0500	-.0595	-.3909
180.000	.0356	-.0754	-.4130

ALPHAT(5) = 8.090 BETAT (3) = -.020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9477	.9129	.5173	.0468	-.1821	-.1823	-.1185	-.0237	.0129	-.0009	.0002	-.0003	.0018	.0002	.0024
30.000			.4725	.0072	-.2018	-.1994	-.1146	-.0068	.0378	-.0216	-.0128	-.0109	-.0081	-.0164	-.0077
60.000			.3603	-.0800	-.2280	-.1977	-.0819	.0660	.1399	-.0956	-.0333	-.0021	-.0063	-.0057	-.0100
90.000		.6345	.2337	-.1835	-.2697	-.2147	-.0662	.0890	.1532		-.0931	.0071	-.0285	-.0322	-.0133
120.000			.1302	-.2584	-.3256	-.2889	-.1736	-.0726	-.1061	-.2383	-.3713	-.1059	-.0664	-.0488	-.0075
135.000								-.0812		-.0441		-.1195		-.0597	
150.000			.0851	-.2970	-.3453	-.3075	-.1911	-.0708	-.0139	.0808	-.0857	-.1340	-.1363	-.1272	-.0883
165.000				-.3068	-.3518	-.3004	-.1751	-.0540	.0323	.1424	.0115	-.0796	-.1001	-.0707	-.0179
180.000	.9477	.4805	.0680	-.3183	-.3489	-.3039	-.1650	-.0454	.0382	.1430	.0713	-.0920	-.1084	-.0633	-.0063
270.000		.6431							.1569						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25 EXTERNAL TANK (RB1T41)

ALPHAT(5) = 8.090 BETAT (3) = -.020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9260
PHI			
.000	-.0093	-.0619	-.4212
30.000	-.0119	-.0487	-.4067
60.000	-.0107	-.0242	-.2589
90.000	.0135	.0044	
120.000	.0360	.0044	-.2415
135.000	.0260	-.0224	-.2866
150.000	-.0301	-.1062	-.1816
165.000	.0345	-.0479	-.3309
180.000	.0348	-.0459	-.3415

ALPHAT(5) = 7.950 BETAT (4) = 8.220

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.8582	.8180	.4565	-.0004	-.2296	-.2369	-.1755	-.0819	-.0405	-.0651	-.0611	-.0628	-.0640	-.0638	-.0648
30.000			.2576	-.1687	-.3304	-.3132	-.2197	-.1064	-.0343	-.0854	-.0859	-.0784	-.0877	-.0915	-.0890
60.000			.0948	-.2923	-.3465	-.2954	-.1538	.0174	.1379	-.0960	-.0797	-.0377	-.0328	-.0340	-.0339
90.000		.3940	-.0007	-.3422	-.3287	-.2437	-.0633	.1052	.1943		-.1378	-.0233	-.0505	-.0598	-.0551
120.000			-.0295	-.3589	-.3251	-.2594	-.1190	.0008	-.0137	-.1979	-.3347	-.1483	-.1116	-.0864	-.0674
135.000								-.0201		-.0509		-.1548		-.1179	
150.000			-.0221	-.3666	-.3491	-.2852	-.1579	-.0331	.0203	.0413	-.2872	-.3523	-.2715	-.2137	-.1432
165.000				-.3640	-.3771	-.3173	-.1862	-.0673	.0177	.0943	-.0876	-.1630	-.1783	-.1666	-.0939
180.000	.8582	.4078	.0272	-.3494	-.3850	-.3340	-.2051	-.0948	-.0091	.0833	.0046	-.1374	-.2125	-.1937	-.1095
270.000		.8491							.1567						

X/LT	.7460	.8530	.9260
PHI			
.000	-.0753	-.1261	-.4682
30.000	-.0818	-.1179	-.4426
60.000	-.0311	-.0520	-.2599
90.000	-.0367	-.0397	
120.000	-.0305	-.0708	-.2781
135.000	-.0346	-.0911	-.3243
150.000	-.1114	-.2105	-.2949
165.000	-.0435	-.1260	-.3649
180.000	-.0779	-.1719	-.4520

ARC11-716 IA14 OL+T12+S12N25 EXTERNAL TANK (RB1T42) (14 FEB 74)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES
LREF = 38.7090 INCHES YMRP = .0000 INCHES
BREF = 38.7090 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = .750 ELEVON = .000
RUDDER = .000 SPOBRK = .000

ALPHAT(1) = -8.370 BETAT (1) = -8.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9052	.4502	.0506	-.3991	-.3639	-.3165	-.1835	-.1568	-.1290	-.1765	-.2023	-.1566	-.0997	-.0887	-.0852
30.000			.1416	-.3138	-.3681	-.3439	-.2313	-.2433	-.2472	-.3300	-.3381	-.1978	-.1244	-.1182	-.1018
60.000			.3082	-.1623	-.2519	-.2396	-.2594	-.1879	-.3098	-.4734	-.6769	-.1932	-.0295	-.0431	-.0530
90.000		.8849	.4972	.0288	-.1044	-.0722	-.0095	.1391	.1591		-.7064	-.5870	-.2232	-.1526	-.1312
120.000			.6271	.1541	-.0178	-.0036	.0487	.1855	.2767	.0462	.0494	.0227	.0025	-.0009	.0232
135.000								.1906		.1775		.0182		-.0171	
150.000			.6466	.1790	-.0148	-.0093	-.0013	.1246	.1933	.3098	.1770	-.0316	-.1384	-.1294	-.0732
165.000				.1665	-.0531	-.0484	-.0392	.0715	.1610	.2786	.1330	-.0435	-.1304	-.1300	-.0512
180.000	.9052	.9548	.5290	.1048	-.0979	-.0864	-.0760	.0428	.1325	.2342	.0558	-.1642	-.1919	-.1742	-.1049
270.000		.4549							.1992						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0920	-.1405	-.4768
30.000	-.1131	-.1416	-.4382
60.000	-.0893	-.1048	-.2296
90.000	-.1994	-.2765	
120.000	.0266	-.0969	-.1880
135.000	.0328	-.1117	-.2861
150.000	-.0585	-.1795	-.1041
165.000	-.0383	-.1528	-.3810
180.000	-.0780	-.1825	-.4299

ALPHAT(1) = -8.220 BETAT (2) = -4.060

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9624	.5026	.0785	-.3716	-.4331	-.3770	-.2389	-.1222	-.0981	-.1531	-.1836	-.1307	-.0725	-.0527	-.0597
30.000			.1297	-.3261	-.4444	-.4020	-.2750	-.1719	-.1782	-.2541	-.3113	-.1551	-.0919	-.0787	-.0712
60.000			.2343	-.2323	-.3701	-.3303	-.2342	-.1499	-.2548	-.4228	-.6700	-.2200	-.0335	-.0395	-.0500
90.000		.7939	.3890	-.0855	-.2472	-.1967	-.0370	.1207	.1589		-.6691	-.5835	-.2138	-.1234	-.0988
120.000			.5267	.0519	-.1595	-.1355	-.0006	.1569	.2621	.0311	-.0105	-.0462	-.0617	-.0385	-.0093
135.000								.1256		.1462		-.0511		-.0544	
150.000			.5946	.1078	-.1280	-.1198	-.0262	.1076	.1889	.2697	.0302	-.0193	-.1668	-.1434	-.0883

ARC11-716 IA14 OL+T12+S12N25 EXTERNAL TANK (RB1T42)

ALPHAT(1) = -8.220 BETAT (2) = -4.060

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
165.000				.1065	-.1350	-.1331	-.0388	.0829	.1763	.2834	.0911	-.0882	-.1632	-.1245	-.0493
180.000	.9624	.9769	.5649	.0761	-.1594	-.1484	-.0446	.0727	.1617	.2658	.0770	-.1637	-.1822	-.1360	-.0748
270.000		.5722							.1715						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0688	-.1219	-.4537
30.000	-.0791	-.1173	-.4496
60.000	-.0651	-.0845	-.2516
90.000	-.1297	-.1576	
120.000	-.0125	-.1432	-.2397
135.000	-.0180	-.1691	-.3284
150.000	-.0918	-.2427	-.1564
165.000	-.0446	-.1875	-.3772
180.000	-.0634	-.2061	-.4374

ALPHAT(1) = -8.200 BETAT (3) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	.9854	.5251	.0905	-.3072	-.4296	-.3688	-.2273	-.1052	-.0860	-.1382	-.1808	-.1205	-.0574	-.0321	-.0287
30.000			.1046	-.3421	-.4212	-.3684	-.2276	-.1178	-.1138	-.1922	-.2753	-.1519	-.0670	-.0607	-.0515
60.000			.1630	-.2890	-.3714	-.3224	-.1985	-.1056	-.1913	-.3628	-.6411	-.2408	-.0365	-.0360	-.0423
90.000		.6947	.2708	-.1913	-.2995	-.2353	-.0580	.1154	.1693		-.6249	-.5472	-.1841	-.0880	-.0712
120.000			.4019	-.0621	-.2326	-.1997	-.0522	.1238	.2529	.0165	-.0612	-.1064	-.1042	-.0685	-.0324
135.000								.0888		.1117		-.1082		-.0896	
150.000			.5112	.0287	-.1871	-.1698	-.0651	.0750	.1715	.2243	-.1316	-.1671	-.2158	-.1691	-.1447
165.000				.0739	-.1549	-.1488	-.0479	.0702	.1688	.2691	.0183	-.1433	-.1788	-.1202	-.0637
180.000	.9854	.9799	.5697	.0800	-.1570	-.1424	-.0316	.0805	.1722	.2615	.0839	-.1542	-.1853	-.1124	-.0480
270.000		.6886							.1585						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0524	-.1100	-.4391
30.000	-.0612	-.0994	-.4191
60.000	-.0572	-.0783	-.2767
90.000	-.0826	-.1095	
120.000	-.0437	-.1828	-.3082
135.000	-.0513	-.2055	-.3563
150.000	-.1436	-.3056	-.2654

ARC11-716 IA14 OI+T12+812NB3 EXTERNAL TANK (RB1T48)

ALPHAT(1) = -8.200 BETAT (3) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
165.000	-.0850	-.2190	-.3898
180.000	-.0588	-.2093	-.4219

ALPHAT(1) = -8.210 BETAT (4) = 4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9628	.9028	.0833	-.3684	-.4348	-.3738	-.2419	-.1222	-.1000	-.1467	-.1858	-.1298	-.0683	-.0568	-.0593
30.000			.0669	-.3730	-.4088	-.3462	-.2019	-.0801	-.0705	-.1585	-.2388	-.1494	-.0472	-.0446	-.0476
60.000			.0842	-.3485	-.3704	-.3032	-.1610	-.0527	-.1240	-.3243	-.6195	-.2134	-.0363	-.0383	-.0409
90.000		.9768	.1580	-.2899	-.3341	-.2469	-.0575	.1289	.1877		-.6151	-.9004	-.1446	-.0717	-.0490
120.000			.2774	-.1855	-.3099	-.2557	-.0888	.0952	.2442	.0023	-.1101	-.1473	-.1263	-.0910	-.0603
135.000								.0492		.0668		-.1746		-.1321	
150.000			.4037	-.0728	-.2568	-.2333	-.1142	.0298	.1360	.1628	-.2815	-.4100	-.3468	-.2425	-.1740
165.000				.0154	-.2024	-.1858	-.0806	.0397	.1374	.2281	-.0360	-.1790	-.1980	-.1276	-.0939
180.000	.9628	.9728	.5558	.0667	-.1604	-.1530	-.0450	.0613	.1591	.2379	.0724	-.1624	-.1892	-.1611	-.0898
270.000		.7948							.1513						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0716	-.1186	-.4513
30.000	-.0598	-.1050	-.4386
60.000	-.0559	-.0901	-.3141
90.000	-.0649	-.1218	
120.000	-.0803	-.2271	-.3699
135.000	-.0962	-.2452	-.4000
150.000	-.2012	-.3693	-.3617
165.000	-.0927	-.2433	-.4258
180.000	-.0998	-.2429	-.4719

ARC11-716 IA14 OL+T12+S12N25 EXTERNAL TANK (RB1T42)

ALPHAT(1) = -0.400 BETAT (5) = 8.190

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	.8968	.4348	.0392	-.4029	-.4671	-.4176	-.2755	-.1641	-.1349	-.1762	-.2008	-.1520	-.1081	-.0945	-.0847
30.000			.0054	-.4166	-.4136	-.3376	-.1842	-.0700	-.0939	-.1411	-.2214	-.1439	-.0638	-.0628	-.0750
60.000			.0051	-.4082	-.3637	-.2771	-.1250	-.0154	-.0732	-.2845	-.6078	-.1903	-.0409	-.0448	-.0522
90.000		.4503	.0364	-.3745	-.3542	-.2497	-.0535	.1261	.2011		-.6159	-.4374	-.1199	-.0603	-.0506
120.000			.1468	-.2924	-.3680	-.3006	-.1259	.0673	.2324	-.0157	-.1474	-.1929	-.1720	-.1477	-.1236
135.000								-.0032		.0184		-.2559		-.2020	
150.000			.2947	-.1652	-.3314	-.2949	-.1781	-.0296	.0872	.0753	-.3827	-.5141	-.4389	-.3029	-.2461
165.000				-.0464	-.2554	-.2378	-.1392	-.0177	.0851	.1418	-.1125	-.2365	-.2550	-.2344	-.1807
180.000	.8968	.8641	.5251	.0401	-.1924	-.1892	-.0782	.0247	.1178	.1834	.0434	-.1906	-.2987	-.2463	-.1687
270.000		.8007							.1438						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0953	-.1418	-.4798
30.000	-.0932	-.1319	-.4490
60.000	-.0883	-.1005	-.3072
90.000	-.0785	-.1661	
120.000	-.1300	-.2477	-.3698
135.000	-.1356	-.2587	-.4070
150.000	-.2654	-.3954	-.3997
165.000	-.1528	-.2691	-.4359
180.000	-.1805	-.2941	-.4761

ALPHAT(2) = -4.360 BETAT (1) = -8.180

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	.9702	.5719	.1645	-.3039	-.4382	-.3989	-.2716	-.1550	-.1323	-.1727	-.1766	-.1352	-.1020	-.0998	-.0945
30.000			.2719	-.2065	-.4010	-.3779	-.2686	-.1765	-.1894	-.2653	-.2587	-.1424	-.1201	-.1096	-.0941
60.000			.4164	-.0682	-.2747	-.2529	-.1631	-.0660	-.1602	-.4254	-.5725	-.0985	-.0193	-.0267	-.0446
90.000		.9423	.5357	.0495	-.1928	-.1165	.0280	.1858	.2659		-.5632	-.2683	-.1269	-.1070	-.0978
120.000			.5802	.0993	-.1239	-.1104	.0080	.1414	.1905	-.0557	.0050	.0267	-.0067	-.0087	.0138
135.000								.0868		.1109		.0141		-.0286	
150.000			.5495	.0651	-.1632	-.1580	-.0688	.0568	.1178	.2563	.1276	-.0423	-.1536	-.1331	-.0673
165.000				.0000	-.2173	-.2065	-.1094	.0125	.1047	.2391	.1113	-.0421	-.1338	-.1294	-.0476
180.000	.9702	.8658	.4151	-.0642	-.2584	-.2374	-.1214	-.0030	.0926	.2115	.0447	-.1542	-.1874	-.1667	-.0887
270.000		.5218							.3153						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 OL+T12+S12M25 EXTERNAL TANK (R81T48)

ALPHAT(2) = -4.360 BETAT (1) = -8.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	-.1019	-.1449	-.4788
30.000	-.0931	-.1212	-.4431
60.000	-.0543	-.0626	-.2223
90.000	-.1392	-.1535	
120.000	.0401	-.0278	-.1797
135.000	.0466	-.0467	-.2773
150.000	-.0234	-.1237	-.0895
165.000	-.0040	-.0967	-.4013
180.000	-.0372	-.1305	-.4397

ALPHAT(2) = -4.360 BETAT (2) = -4.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0310	.6298	.1971	-.2786	-.4095	-.3691	-.2287	-.1169	-.0944	-.1408	-.1429	-.1083	-.0716	-.0548	-.0329
30.000			.2512	-.2212	-.3875	-.3552	-.2294	-.1275	-.1342	-.2278	-.2010	-.1215	-.0935	-.0753	-.0626
60.000			.3387	-.1448	-.3034	-.2712	-.1590	-.0498	-.1205	-.4207	-.5556	-.0879	-.0364	-.0369	-.0383
90.000		.8567	.4248	-.0557	-.2213	-.1650	-.0010	.1762	.2715		-.3977	-.0087	-.0455	-.0504	-.0363
120.000			4879	.0089	-.1884	-.1547	-.0243	.1270	.1950	-.0752	-.0133	-.0068	-.0487	-.0497	-.0199
135.000								.0829		.0902		-.0491		-.0638	
150.000			.4998	.0117	-.1986	-.1750	-.0722	.0606	.1310	.2350	.0405	-.0272	-.1625	-.1494	-.0923
165.000				-.0115	-.2206	-.2014	-.0881	.0378	.1271	.2498	.0921	-.0895	-.1557	-.1251	-.0480
180.000	1.0310	.8869	.4489	-.0407	-.2322	-.2112	-.0918	.0410	.1219	.2318	.0778	-.1482	-.1704	-.1369	-.0665
270.000		.6419							.2917						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0568	-.1056	-.4456
30.000	-.0582	-.0907	-.4163
60.000	-.0454	-.0602	-.2459
90.000	-.0345	-.0538	
120.000	.0040	-.0805	-.2809
135.000	.0024	-.1013	-.3293
150.000	-.0595	-.1752	-.1441
165.000	-.0199	-.1335	-.3811
180.000	-.0335	-.1541	-.4359

ARC11-716 IA14 01+T12+S12N25 EXTERNAL TANK (RB1T42)

ALPHAT(2) = -4.350 BETAT (3) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0330	.6472	.2041	-.2714	-.3976	-.3603	-.2233	-.1091	-.0837	-.1367	-.1284	-.0882	-.0610	-.0435	-.0416
30.000			.2194	-.2605	-.3899	-.3473	-.2091	-.0897	-.0909	-.1919	-.1696	-.0954	-.0773	-.0622	-.0479
60.000			.2527	-.2221	-.3315	-.2794	-.1415	-.0199	-.0819	-.4090	-.5054	-.1138	-.0486	-.0410	-.0330
90.000		.752*	.3094	-.1627	-.2775	-.1975	-.0155	.1697	.2794		-.3389	.0050	-.0361	-.0583	-.0532
120.000			.3771	-.0966	- 2568	-.2032	-.0490	.1117	.1975	-.0822	-.0556	-.0635	-.0862	-.0720	-.0417
135.000								.0692		.0690		-.1015		-.0915	
150.000			.4338	-.0557	-.2368	-.2128	-.0952	.0515	.1353	.1939	-.1268	-.1457	-.2144	-.1741	-.1383
165.000				-.0300	-.2326	-.2100	-.0952	.0395	.1346	.2379	.0213	-.1264	-.1689	-.1268	-.0639
180.000	1.0330	.8929	.4600	-.0314	-.2319	-.2075	-.0827	.0420	.1386	.2298	.0789	-.1383	-.1743	-.1200	-.0482
270.000		.7518							.2722						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0454	-.0970	-.4367
30.000	-.0519	-.0863	-.4261
60.000	-.0410	-.0600	-.2781
90.000	-.0399	-.0689	
120.000	-.0256	-.1148	-.2811
135.000	-.0310	-.1363	-.3256
150.000	-.1078	-.2344	-.2365
165.000	-.0396	-.1993	-.3620
180.000	-.0327	-.1484	-.3900

ALPHAT(2) = -4.360 BETAT (4) = 4.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0290	.6242	.1976	-.2980	-.4072	-.3669	-.2400	-.1205	-.0982	-.1455	-.1382	-.1041	-.0726	-.0536	-.0516
30.000			.1638	-.3012	-.3942	-.3429	-.1962	-.0722	-.0619	-.1684	-.1657	-.0990	-.0663	-.0525	.0526
60.000			.1620	-.2968	-.3458	-.2768	-.1240	.0065	-.0364	-.3877	-.4473	-.1566	-.0720	-.0525	-.0411
90.000		.6370	.1942	-.2630	-.3105	-.2199	-.0194	.1737	.2973		-.2964	.0200	-.0524	-.0759	.0674
120.000			.2560	-.2052	-.3039	-.2432	-.0703	.1021	.2021	-.0905	-.0941	-.0934	-.0824	-.0911	.0577
135.000								.0483		.0340		-.1342		-.1159	
150.000			.3446	-.1355	-.2859	-.2517	-.1222	.0252	.1187	.1415	-.2551	-.3474	-.3400	-.2581	-.1584
165.000				-.0720	-.2674	-.2391	-.1182	.0081	.1120	.2061	-.0365	-.1669	-.1818	-.1345	-.0868
180.000	1.0290	.8921	.4464	-.0441	-.2416	-.2190	-.0967	.0194	.1212	.2117	.0702	-.1489	-.1808	-.1619	-.0896
270.000		.8582							.2626						

X/LT	.7480	.8530	.9280
PHI			

ARC11-716 IA14 OL+T12+S12M25 EXTERNAL TANK (RB1T42)

ALPHAT(2) = -4.380 BETAT (4) = 4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8330	.9280
PHI			
.000	-.0382	-.1065	-.4406
30.000	-.0542	-.0956	-.4406
60.000	-.0438	-.0639	-.2755
90.000	-.0619	-.1034	
120.000	-.0619	-.1595	-.3183
135.000	-.0486	-.1780	-.3582
150.000	-.1525	-.2890	-.3185
165.000	-.0655	-.1812	-.3804
180.000	-.0708	-.1865	-.4471

ALPHAT(2) = -4.380 BETAT (5) = 8.190

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	.9634	.5805	.1544	-.3105	-.4388	-.4006	-.2715	-.1593	-.1367	-.1762	-.1725	-.1339	-.1081	-.0977	-.0819
30.000			.0828	-.3581	-.4087	-.3424	-.1922	-.0729	-.0531	-.1618	-.1609	-.1058	-.0831	-.0806	-.0721
60.000			.0671	-.3627	-.3480	-.2656	-.1042	.0298	.0031	-.3674	-.3886	-.1697	-.0905	-.0883	-.0580
90.000		.5178	.0799	-.3413	-.3234	-.2121	-.0109	.1803	.3212		-.2653	.0153	-.0710	-.1063	-.1201
120.000			.1475	-.2971	-.3408	-.2595	-.0890	.0930	.1987	-.1105	-.1335	-.1328	-.1490	-.1416	-.1197
135.000								.0239		.0000		-.2100		-.1856	
150.000			.2383	-.2221	-.3424	-.2947	-.1606	-.0125	.0912	.0815	-.3632	-.4665	-.4210	-.2847	-.2133
165.000				-.1321	-.3112	-.2767	-.1606	-.0323	.0705	.1304	-.1059	-.2163	-.2346	-.2172	-.1463
180.000	.9634	.7859	.4147	-.0680	-.2667	-.2417	-.1279	-.0125	.0829	.1525	.0406	-.1817	-.2813	-.2473	-.1592
270.000		.9440							.2588						

X/LT	.7480	.8330	.9280
PHI			
.000	-.0901	-.1433	-.4731
30.000	-.0721	-.1078	-.4292
60.000	-.0577	-.0819	-.2551
90.000	-.1370	-.2006	
120.000	-.1077	-.1771	-.2903
135.000	-.1054	-.1921	-.3664
150.000	-.2050	-.3228	-.3622
165.000	-.1160	-.2067	-.4270
180.000	-.1444	-.2408	-.5038

A4C11-716 IA14 OI+T12+S12N25 EXTERNAL TANK (RB1T42)

ALPHAT(3) = -.500 BETAT (1) = -8.200

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	.9925	.6697	.2637	-.2219	-.4023	-.3754	-.2559	-.1467	-.1144	-.1534	-.1510	-.1255	-.1039	-.0982	-.0829
30.000			.3833	-.1023	-.3344	-.3193	-.2207	-.1250	-.1298	-.2189	-.1808	-.1178	-.0949	-.0853	-.0729
60.000			.4950	.0029	-.2141	-.1970	-.0983	.0085	-.0418	-.3740	-.3975	-.0642	-.0107	-.0135	-.0157
90.000		.9663	.5527	.0651	-.1456	-.1062	.0388	.2023	.3081		-.4024	.0524	-.0175	-.0341	-.0216
120.000			.5270	.0469	-.1764	-.1529	-.0369	.0860	.0971	-.1490	-.0026	.0586	-.0036	-.0193	.0004
135.000								.0286		.0516		.0293		-.0316	
150.000			.4500	-.0311	-.2442	-.2232	-.1250	-.0006	.0523	.2152	.1053	-.0413	-.1530	-.1143	-.0375
165.000				-.1022	-.2961	-.2702	-.1541	-.0302	.0558	.2061	.0991	-.0254	-.1357	-.1178	-.0329
180.000	.9925	.7782	.3122	-.1804	-.3198	-.2942	-.1509	-.0328	.0613	.1890	.0410	-.1477	-.1858	-.1666	-.0817
270.000		.5357							.3682						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0890	-.1361	-.4475
30.000	-.0806	-.0930	-.4201
60.000	-.0157	-.0214	-.2199
90.000	.0026	-.0152	
120.000	.0544	.0117	-.2123
135.000	.0581	-.0059	-.2020
150.000	.0041	-.0911	-.1970
165.000	.0219	-.0642	-.3912
180.000	-.0140	-.0941	-.4356

ALPHAT(3) = -.500 BETAT (2) = -4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.0580	.7364	.3026	-.1921	-.3732	-.3441	-.2253	-.1035	-.0750	-.1188	-.1149	-.0893	-.0673	-.0577	-.0505
30.000			.3552	-.1371	-.3394	-.3114	-.1940	-.0646	-.0212	-.1796	-.1513	-.0942	-.0713	-.0635	-.0472
60.000			.4142	-.0816	-.2651	-.2264	-.1062	.0203	-.0137	-.3727	-.3844	-.0944	-.0273	-.0235	-.0190
90.000		.8762	.4399	-.0505	-.2151	-.1572	.0090	.1924	.3137		-.4552	.0198	-.0542	-.0736	-.0505
120.000			.4335	-.0535	-.2280	-.1894	-.0555	.0854	.1150	-.1652	-.0395	.0056	-.0558	-.0643	-.0307
135.000								.0419		.0423		-.0373		-.0729	
150.000			.4065	-.0791	-.2514	-.2339	-.1201	.0192	.0782	.1953	.0495	-.0350	-.1630	-.1476	-.0714
165.000				-.1119	-.2901	-.2562	-.1307	.0001	.0951	.2167	.0839	-.0756	-.1463	-.1224	-.0335
180.000	1.0360	.7971	.3439	-.1444	-.3710	-.3470	-.1251	.0093	.0931	.2120	.0736	-.1320	-.1651	-.1307	-.0617
270.000		.3665							.3441						

X/LT	.7480	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T42)

ALPHAT(3) = -.590 BETAT (2) = -4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0513	-.0948	-.4164
30.000	-.0423	-.0729	-.3956
60.000	-.0201	-.0268	-.2319
90.000	-.0132	-.0123	
120.000	.0109	-.0349	-.2483
135.000	.0217	-.0506	-.3126
150.000	-.0245	-.1336	-.1388
165.000	.0069	-.0894	-.3998
180.000	-.0093	-.1026	-.4346

ALPHAT(3) = -.540 BETAT (3) = .020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0030	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0750	.7532	.3128	-.1861	-.3629	-.3380	-.2139	-.0897	-.0623	-.1121	-.1071	-.0802	-.0557	-.0518	-.0344
30.000			.3110	-.1752	-.3487	-.3172	-.1856	-.0631	-.0519	-.1590	-.1433	-.0839	-.0624	-.0551	-.0414
60.000			.3140	-.1694	-.3056	-.2526	-.1098	.0308	.0133	-.3059	-.3503	-.1215	-.0570	-.0453	-.0321
90.000		.7735	.3231	-.1580	-.2736	-.1959	-.0048	.1903	.3259		-.4161	-.0071	-.0855	-.1002	-.0619
120.000			.3372	-.1422	-.2718	-.2222	-.0663	.0833	.1320	-.1671	-.0775	-.0515	-.0962	-.0865	-.0488
135.000								.0413		.0274		-.0928		-.0937	
150.000			.3496	-.1358	-.2855	-.2443	-.1170	.0242	.0922	.1659	-.1386	-.1194	-.2025	-.1732	-.1257
165.000				-.1322	-.2973	-.2585	-.1265	.0029	.0992	.2094	.0198	-.1166	-.1528	-.1325	-.0627
180.000	1.0750	.7963	.3498	-.1354	-.2962	-.2631	-.1193	.0076	.1022	.2013	.0778	-.1280	-.1675	-.1200	-.0467
270.000		.7783							.3238						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0385	-.0790	-.4216
30.000	-.0332	-.0699	-.4141
60.000	-.0295	-.0417	-.2528
90.000	-.0288	-.0285	
120.000	-.0137	-.0662	-.2556
135.000	-.0092	-.0815	-.3022
150.000	-.0734	-.1728	-.2219
165.000	-.0141	-.1125	-.3508
180.000	-.0062	-.1035	-.3710

ARC11-716 IA14 01+T12+S12N25 EXTERNAL TANK (RB1T42)

ALPHAT(3) = -.550 BETAT (4) = 4.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0510	.7286	.2945	-.1964	-.3743	-.3510	-.2291	-.1063	-.0803	-.1262	-.1210	-.0956	-.0693	-.0583	-.0514
30.000			.2413	-.2380	-.3743	-.3316	-.1913	-.0630	-.0364	-.1422	-.1401	-.0921	-.0686	-.0620	-.0461
60.000			.2128	-.2549	-.3337	-.2686	-.1058	.0487	.0457	-.3505	-.3225	-.1477	-.0781	-.0578	-.0419
90.000		.6572	.2034	-.2556	-.2992	-.2107	-.0072	.1971	.3487		-.3836	-.0315	-.1066	-.1151	-.0772
120.000			.2284	-.2329	-.3099	-.2403	-.0702	.0909	.1512	-.1644	-.1033	-.0807	-.1190	-.1032	-.0682
135.000								.0411		.0096		-.1215		-.1239	
150.000			.2716	-.2014	-.3232	-.2721	-.1299	.0159	.0953	.1235	-.2344	-.3051	-.3348	-.2500	-.1436
165.000				-.1668	-.3129	-.2755	-.1426	-.0070	.0872	.1867	-.0399	-.1570	-.1757	-.1271	-.0814
180.000	1.0510	.8028	.3423	-.1454	-.3077	-.2739	-.1296	-.0072	.0891	.1853	.0722	-.1325	-.1803	-.1594	-.0844
270.000		.8832							.3122						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0552	-.0955	-.4226
30.000	-.0484	-.0779	-.4235
60.000	-.0447	-.0552	-.2521
90.000	-.0498	-.0700	
120.000	-.0489	-.1101	-.2933
135.000	-.0473	-.1282	-.3519
150.000	-.1196	-.2363	-.3044
165.000	-.0441	-.1451	-.3943
180.000	-.0496	-.1476	-.4590

ALPHAT(3) = -.540 BETAT (5) = 8.230

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9867	.6656	.2562	-.2255	-.4027	-.3812	-.2703	-.1512	-.1239	-.1638	-.1571	-.1327	-.1103	-.1056	-.1005
30.000			.1526	-.3124	-.4132	-.3589	-.2087	-.0762	-.0378	-.1438	-.1482	-.1079	-.0814	-.0800	-.0686
60.000			.1078	-.3372	-.3543	-.2687	-.0984	.0556	.0635	-.3363	-.2865	-.1576	-.0937	-.0697	-.0591
90.000		.5329	.0927	-.3450	-.3176	-.2081	.0043	.2059	.3700		-.3401	-.0627	-.1436	-.1481	-.1200
120.000			.1170	-.3214	-.3319	-.2484	-.0681	.0967	.1593	-.1755	-.1403	-.1210	-.1560	-.1495	-.1156
135.000								.0351		-.0165		-.1760		-.1736	
150.000			.1765	-.2803	-.3611	-.3037	-.1540	-.0007	.0856	.0812	-.3662	-.3996	-.4073	-.2865	-.1990
165.000				-.2215	-.3538	-.3075	-.1750	-.0431	.0545	.1271	-.0986	-.2119	-.2355	-.2162	-.1393
180.000	.9867	.6897	.3078	-.1734	-.3308	-.2995	-.1586	-.0477	.0475	.1380	.0383	-.1707	-.2810	-.2396	-.1467
270.000		.9750							.3045						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T42)

ALPHAT(3) = -.540 BETAT (5) = 8.230

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.1079	-.1457	-.4529
30.000	-.0726	-.0966	-.4173
60.000	-.0652	-.0802	-.2626
90.000	-.1114	-.1353	
120.000	-.0814	-.1309	-.2807
135.000	-.0786	-.1503	-.3545
150.000	-.1716	-.2682	-.3407
165.000	-.0908	-.1677	-.4161
180.000	-.1172	-.2064	-.4900

ALPHAT(4) = 4.160 BETAT (1) = -8.210

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.0822	.0597	-.2696	-.2713	-.2689	-.1385	.0553	-.0547	-.0519	-.0928	-.0553	-.3238	-.4268	-.5173	-.2656
30.000			-.2144	-.2250	-.4520	-.3988	-.3771	-.0480	-.0804	-.2641	-.0523	-.2702	-.4275	-.5112	-.2635
60.000			-.0219	-.0697	-.3908	-.3953	-.2933	-.0508	-.0751	-.2890	-.2725	-.2315	-.3975	-.5478	-.4426
90.000		.0028	-.0274	-.0429	-.0654	-.0780	-.0478	-.0489	-.0748		-.1385	-.1770	-.3658	-.5607	-.8370
120.000			-.0221	-.0619	-.0757	-.0908	-.0552	-.0686	-.1331	-.3624	-.0903	-.1332	-.3457	-.5723	-.8811
135.000								-.0651		-.0891		-.1418		-.5702	
150.000			.0058	-.0695	-.0862	-.0785	-.0524	-.0714	-.2652	-.0879	-.0402	-.3961	-.3173	-.6380	-.8795
165.000				-.0919	-.0997	-.0291	-.0471	-.1303	-.2874	-.0805	-.3039	-.4066	-.2802	-.5948	-.2635
180.000	.0822	.0581	-.2632	-.2609	-.1056	.0500	-.0619	-.2695	-.0896	-.0844	-.3100	-.4168	-.3297	-.5795	-.2673
270.000		-.1180							-.0833						

X/LT	.7460	.8530	.9280
PHI			
.000	-.9514	-.8297	-.5565
30.000	-.5934	-.7987	-.5230
60.000	-.5470	-.7853	-.5098
90.000	-.5164	-.4207	
120.000	-.4800	-.3830	-.5491
135.000	-.4362	-.3634	-1.0840
150.000	-.3708	-.3541	-1.0140
165.000	-.7837	-.3856	1.1000
180.000	-.8217	-.5824	1.0440

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T42)

ALPHAT(4) = 4.180 BETAT (2) = -4.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0370	.8590	.4414	-.0699	-.2980	-.2877	-.1816	-.0713	-.0322	-.0607	-.0596	-.0521	-.0445	-.0424	-.0363
30.000			.4908	-.0146	-.2551	-.2450	-.1367	-.0241	-.0046	-.0931	-.0607	-.0410	-.0326	-.0337	-.0265
60.000			.4851	-.0128	-.2140	-.1802	-.0616	.0877	.1046	-.2763	-.0945	-.0382	-.0379	-.0314	-.0170
90.000		.8570	.4285	-.0537	-.2218	-.1690	-.0003	.1780	.2915		-.5399	-.0955	-.0871	-.0646	-.0305
120.000			.3437	-.1356	-.2881	-.2469	-.1164	.0023	-.0111	-.2406	-.2420	-.0419	-.0498	-.0398	.0022
135.000								-.0340		-.0183		-.0722		-.0570	
150.000			.2768	-.1910	-.3342	-.2980	-.1731	-.0405	.0019	.1474	.0388	-.1032	-.1447	-.1312	-.0472
165.000				-.2332	-.3541	-.3094	-.1676	-.0410	.0439	.1808	.0671	-.0722	-.1218	-.0978	-.0133
180.000	1.0370	.6630	.2054	-.2610	-.3593	-.3030	-.1467	-.0165	.0637	.1827	.0641	-.1340	-.1466	-.0992	-.0391
270.000		.6414							.3252						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0384	-.0783	-.3975
30.000	-.0221	-.0454	-.3736
60.000	-.0054	-.0012	-.2026
90.000	.0050	-.0010	
120.000	.0607	.0383	-.1993
135.000	.0637	.0171	-.2782
150.000	.0208	-.0722	-.0963
165.000	.0521	-.0341	-.3671
180.000	.0325	-.0551	-.4113

ALPHAT(4) = 4.190 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0390	.8753	.4445	-.0562	-.2921	-.2765	-.1773	-.0582	-.0191	-.0557	-.0492	-.0387	-.0306	-.0259	-.0218
30.000			.4272	-.0753	-.2953	-.2724	-.1554	-.0311	.0077	-.0942	-.0629	-.0441	-.0346	-.0397	-.0323
60.000			.3766	-.1177	-.2793	-.2334	-.0830	.0750	.1189	-.2776	-.0948	-.0476	-.0516	-.0525	-.0376
90.000		.7538	.3138	-.1646	-.2811	-.2038	-.0156	.1764	.3031		-.5050	-.1162	-.1068	-.0806	-.0361
120.000			.2575	-.2144	-.3149	-.2528	-.1073	.0266	.0232	-.2465	-.2455	-.1116	-.0991	-.0736	-.0174
135.000								-.0064		-.0226		-.1139		-.0788	
150.000			.2295	-.2389	-.3442	-.2895	-.1548	-.0161	.0401	.1246	-.1428	-.1466	-.1692	-.1571	-.0877
165.000				-.2414	-.3529	-.2993	-.1562	-.0212	.0630	.1810	.0043	-.1218	-.1399	-.1111	-.0318
180.000	1.0590	.6606	.2180	-.2503	-.3508	-.2998	-.1490	-.0163	.0639	.1780	.0732	-.1303	-.1441	-.1009	-.0221
270.000		.7586							.3053						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T42)

ALPHAT(4) = 4.190 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0225	-.0657	-.3815
30.000	-.0255	-.0483	-.3836
60.000	-.0228	-.0295	-.2328
90.000	-.0035	-.0110	
120.000	.0287	-.0064	-.2254
135.000	.0269	-.0249	-.2853
150.000	-.0235	-.1030	-.1831
165.000	.0269	-.0462	-.3445
180.000	.0309	-.0453	-.3720

ALPHAT(4) = 4.180 BETAT (4) = 4.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1[illegible]	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0400	.8496	.4223	-.0739	-.3019	-.2959	-.1883	-.0694	-.0329	-.0759	-.0657	-.0595	-.0507	-.0480	-.0379
30.000			.3359	-.1475	-.3363	-.3093	-.1828	-.0502	.0004	-.0981	-.0825	-.0588	-.0578	-.0515	-.0497
60.000			.2516	-.2184	-.3357	-.2644	-.1056	.0683	.1251	-.2608	-.1018	-.0483	-.0613	-.0606	-.0511
90.000		.6403	.1951	-.2679	-.3169	-.2188	-.0171	.1802	.3266		-.4534	-.1090	-.1128	-.0872	-.0465
120.000			.1659	-.2855	-.3255	-.2564	-.0891	.0501	.0607	-.2290	-.2436	-.1667	-.1310	-.0884	-.0396
135.000								.0157		-.0278		-.1597		-.1042	
150.000			.1721	-.2920	-.3544	-.2845	-.1401	.0096	.0570	.0923	-.2275	-.3130	-.3188	-.2133	-.1211
165.000				-.2731	-.3633	-.3048	-.1619	-.0260	.0611	.1624	-.0498	-.1594	-.1571	-.1184	-.0605
180.000	1.0400	.6707	.2065	-.2626	-.3678	-.3162	-.1642	-.0380	.0517	.1587	.0658	-.1338	-.1540	-.1449	-.0633
270.000		.8705							.2972						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0419	-.0758	-.3973
30.000	-.0387	-.0700	-.3957
60.000	-.0426	-.0558	-.2674
90.000	-.0201	-.0308	
120.000	.0001	-.0600	-.2708
135.000	-.0139	-.0874	-.3382
150.000	-.0813	-.1924	-.2806
165.000	-.0099	-.1024	-.3679
180.000	-.0152	-.1154	-.4560

ARC11-716 IA14 01+T12+S12N25 EXTERNAL TANK (RB1T42)

ALPHAT(4) = 4.180 BETAT (5) = 8.240

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9708	.7871	.3905	-.1022	-.3309	-.3229	-.2296	-.1186	-.0780	-.1214	-.1078	-.0978	-.0895	-.0875	-.0810
30.000			.2389	-.2309	-.3969	-.3555	-.2194	-.0864	-.0179	-.1124	-.1064	-.0834	-.0779	-.0824	-.0782
60.000			.1364	-.3111	-.3775	-.2903	-.1147	.0678	.1356	-.2501	-.1111	-.0613	-.0744	-.0719	-.0636
90.000		.5122	.0837	-.3449	-.3277	-.2159	-.0045	.1901	.3515		-.3286	-.0771	-.1033	-.0889	-.0592
120.000			.0713	-.3534	-.3348	-.2460	-.0668	.0754	.0916	-.2165	-.2531	-.2164	-.1589	-.1196	-.0737
135.000								.0307		-.0334		-.1878		-.1602	
150.000			.0912	-.3449	-.3697	-.2935	-.1422	.0016	.0666	.0670	-.3325	-.3916	-.3552	-.2542	-.1693
165.000				-.3204	-.3857	-.3215	-.1852	-.0465	.0417	.1233	-.0908	-.2090	-.2232	-.2064	-.1185
180.000	.9708	.5712	.1766	-.2873	-.3882	-.3329	-.1864	-.0747	.0239	.1143	.0210	-.1666	-.2632	-.2287	-.1315
270.000		.9552							.2866						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0927	-.1308	-.4342
30.000	-.0711	-.1039	-.4168
60.000	-.0564	-.0622	-.2689
90.000	-.0384	-.0430	
120.000	-.0396	-.0877	-.2934
135.000	-.0477	-.1055	-.3443
150.000	-.1333	-.2281	-.3219
165.000	-.0615	-.1353	-.3814
180.000	-.0921	-.1745	-.4903

ALPHAT(5) = 8.160 BETAT (1) = -8.220

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9192	.8753	.5037	.0066	-.2576	-.2562	-.1693	-.0733	-.0294	-.0558	-.0579	-.0589	-.0561	-.0608	-.0584
30.000			.6290	.1325	-.1483	-.1531	-.0712	.0219	.0448	-.0364	-.0131	-.0071	-.0089	-.0061	-.0030
60.000			.6327	.1481	-.1048	-.0947	.0110	.1501	.1857	-.1362	-.0140	.0422	.0286	.0233	.0198
90.000		.8928	.5105	.0336	-.1715	-.1374	.0003	.1457	.2049		-.3055	.0175	-.0148	-.0218	.0093
120.000			.3269	-.1374	-.3191	-.2929	-.2049	-.1236	-.1702	-.2586	-.5377	.0216	.0404	.0237	.0459
135.000								-.1537		-.0744		-.0299		.0026	
150.000			.1661	-.2650	-.4129	-.3728	-.2679	-.1509	-.1043	.1079	-.0178	-.0738	-.1102	-.0865	-.0211
165.000				-.3271	-.4216	-.3692	-.2378	-.1085	-.0208	.1303	.0452	-.0127	-.0774	-.0960	.0101
180.000	.9192	.5301	.0663	-.3651	-.4072	-.3413	-.1765	-.0431	.0258	.1409	.0210	-.1284	-.1408	-.1197	-.0313
270.000		.4567							.2701						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 OL+T12+S12N25 EXTERNAL TANK (RB1T42)

ALPHAT(5) = 8.160 BETAT (1) = -8.220

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0634	-.1076	-.4091
30.000	.0001	-.0291	-.3578
60.000	.0353	.0350	-.1899
90.000	.0498	.0301	
120.000	.1138	.1121	-.1509
135.000	.1256	.1006	-.2089
150.000	.0617	-.0078	-.0196
165.000	.0845	.0119	-.3156
180.000	.0493	-.0277	-.3792

ALPHAT(5) = 8.200 BETAT (2) = -4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9769	.9469	.5498	.0476	-.2189	-.2267	-.1362	-.0321	.0144	-.0118	-.0173	-.0195	-.0132	-.0180	-.0168
30.000			.5854	.0850	-.1843	-.1839	-.0885	.0216	.0584	-.0270	-.0091	.0018	.0036	-.0046	-.0010
60.000			.5237	.0284	-.1889	-.1630	-.0449	.1190	.1838	-.1488	-.0341	.0212	.0106	.0022	-.0042
90.000		.7946	.3885	-.0879	-.2510	-.1974	-.0356	.1297	.2005		-.3086	.0112	-.0430	-.0539	-.0166
120.000			.2429	-.2155	-.3540	-.3072	-.1865	-.0956	-.1372	-.2608	-.5519	-.0582	-.0154	-.0173	.0146
135.000								-.1068		-.0528		-.1152		-.0425	
150.000			.1561	-.2987	-.4001	-.3519	-.2246	-.1000	-.0540	.1081	-.0227	-.1533	-.1358	-.1111	-.0374
165.000				-.3366	-.4003	-.3432	-.1918	-.0626	.0219	.1502	.0392	-.0716	-.1056	-.0775	.0008
180.000	.9769	.5348	.0804	-.3524	-.3909	-.3246	-.1572	-.0291	.0504	.1645	.0649	-.1294	-.1257	-.0871	-.0181
270.000		.5782							.2339						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0197	-.0560	-.3667
30.000	.0060	-.0193	-.3493
60.000	.0076	.0068	-.2044
90.000	.0262	.0209	
120.000	.0737	.0681	-.1891
135.000	.0816	.0456	-.2612
150.000	.0383	-.0488	-.0842
165.000	.0732	-.0131	-.3537
180.000	.0526	-.0340	-.3944

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T42)

ALPHAT(5) = 8.090 BETAT (3) = .020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.0010	.9639	.5569	.0546	-.2166	-.2209	-.1325	-.0097	.0290	-.0034	-.0113	-.0025	-.0013	-.0003	.0064
30.000			.5145	.0165	-.2342	-.2305	-.1203	.0085	.0529	-.0278	-.0250	-.0127	-.0127	-.0148	-.0022
60.000			.4006	-.0850	-.2672	-.2314	-.0795	.0993	.1838	-.1394	-.0548	.0068	-.0071	-.0082	-.0103
90.000		.6919	.2703	-.1958	-.3044	-.2364	-.0490	.1299	.2122		-.2582	.0121	-.0539	-.0552	-.0237
120.000			.1694	-.2832	-.3551	-.2981	-.1582	-.0536	-.0782	-.2336	-.4855	-.1116	-.0609	-.0469	-.0090
135.000								-.0580		-.0234		-.1374		-.0640	
150.000			.1173	-.3216	-.3774	-.3210	-.1815	-.0525	.0040	.0983	-.1261	-.1581	-.1592	-.1284	-.0777
165.000				-.3311	-.3742	-.3228	-.1677	-.0379	.0463	.1578	.0020	-.1048	-.1168	-.0827	-.0193
180.000	1.0010	.5408	.0985	-.3425	-.3833	-.3187	-.1543	-.0289	.0509	.1672	.0778	-.1209	-.1315	-.0735	-.0044
270.000		.7026							.2197						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0019	-.0391	-.3505
30.000	-.0019	-.0273	-.3537
60.000	-.0111	-.0114	-.2296
90.000	.0095	.0092	
120.000	.0465	.0320	-.2120
135.000	.0458	.0113	-.2603
150.000	-.0072	-.0772	-.1623
165.000	.0499	-.0213	-.3183
180.000	.0545	-.0199	-.3456

ALPHAT(5) = 8.070 BETAT (4) = 4.160

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	.9799	.9334	.5357	.0349	-.2258	-.2278	-.1441	-.0276	.0151	-.0209	-.0265	-.0184	-.0163	-.0200	-.0115
30.000			.4155	-.0675	-.2931	-.2836	-.1685	-.0324	.0317	-.0470	-.0578	-.0422	-.0385	-.0460	-.0365
60.000			.2722	-.1960	-.3341	-.2824	-.1171	.0732	.1796	-.1349	-.0740	-.0139	-.0214	-.0228	-.0196
90.000		.5782	.1542	-.2946	-.3387	-.2564	-.0553	.1362	.2300		-.2464	.0129	-.0472	-.0458	-.0242
120.000			.0883	-.3463	-.3519	-.2842	-.1206	-.0049	-.0313	-.2229	-.4202	-.1420	-.0956	-.0651	-.0215
135.000								-.0170		-.0235		-.1593		-.0848	
150.000			.0756	-.3609	-.3681	-.2938	-.1497	-.0235	.0358	.0865	-.2359	-.2855	-.2570	-.1816	-.1085
165.000				-.3505	-.3809	-.3137	-.1615	-.0364	.0485	.1542	-.0494	-.1362	-.1274	-.0825	-.0378
180.000	.9799	.5417	.0851	-.3549	-.3950	-.3316	-.1692	-.0518	.0365	.1473	.0705	-.1119	-.1211	-.1038	-.0464
270.000		.8107							.2145						

X/LT	.7460	.8530	.9280
PHI			

ARC11-T16 IA14 O6+T12+S12N25 EXTERNAL TANK (RB1T42)

ALPHAT(5) = 8.070 BETAT (4) = 4.160

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0226	-.0531	-.3685
30.000	-.0275	-.0521	-.3803
60.000	-.0175	-.0218	-.2380
90.000	-.0059	-.0086	
120.000	.0181	-.0250	-.2517
135.000	.0097	-.0510	-.3109
150.000	-.0362	-.1408	-.2517
165.000	.0120	-.0692	-.3452
180.000	.0078	-.0829	-.4277

ALPHAT(5) = 8.080 BETAT (5) = 8.310

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9118	.8765	.5029	.0161	-.2535	-.2614	-.1772	-.0739	-.0316	-.0688	-.0636	-.0647	-.0668	-.0623	-.0557
30.000			.3074	-.1653	-.3647	-.3489	-.2204	-.0869	-.0023	-.0795	-.0929	-.0926	-.0865	-.0786	-.0775
60.000			.1312	-.3054	-.4028	-.3273	-.1419	.0549	.1844	-.1334	-.0957	-.0356	-.0325	-.0295	-.0300
90.000		.4481	.0371	-.3752	-.3533	-.2412	-.0407	.1445	.2664		-.3413	-.0048	-.0421	-.0583	-.0562
120.000			.0002	-.3918	-.3401	-.2494	-.0834	.0401	.0274	-.2006	-.4340	-.1666	-.1186	-.1102	-.0615
135.000								.0159		-.0313		-.1732		-.1325	
150.000			.0030	-.3911	-.3649	-.2813	-.1280	-.0014	.0544	.0696	-.2899	-.3913	-.2852	-.2192	-.1335
165.000				-.3871	-.3946	-.3161	-.1774	-.0390	.0323	.1252	-.0854	-.1704	-.1921	-.1765	-.0953
180.000	.9118	.4639	.0650	-.3820	-.4270	-.3487	-.1904	-.0755	.0066	.1008	.0175	-.1348	-.2149	-.2025	-.1032
270.000		.8992							.2116						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0640	-.1082	-.4089
30.000	-.0765	-.1033	-.4041
60.000	-.0195	-.0347	-.2277
90.000	-.0244	-.0190	
120.000	-.0045	-.0439	-.2686
135.000	-.0168	-.0663	-.3133
150.000	-.1029	-.1983	-.2949
165.000	-.0386	-.0949	-.3517
180.000	-.0585	-.1409	-.4346

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T43) (14 FEB 74)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES
LREF = 58.7090 INCHES YMRP = .0000 INCHES
BREF = 59.7090 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = .950 ELEVON = .000
RUDDER = .000 SPOBRK = .000

ALPHAT(1) = -8.480 BETAT (1) = -8.150

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9537	.9054	.0987	-.3974	-.5304	-.3120	-.1760	-.1142	-.1032	-.1773	-.2346	-.1725	-.1090	-.0917	-.0709
30.000			.1945	-.2995	-.4781	-.4378	-.2474	-.2093	-.2425	-.3256	-.3816	-.2022	-.1248	-.1085	-.0876
60.000			.3576	-.1363	-.3232	-.2878	-.2307	-.1516	-.2617	-.5541	-.6887	-.2928	-.0462	-.0066	-.0193
90.000		.9339	.5455	.0530	-.1631	-.1099	.0230	.1856	.2311		-.6794	-.6042	-.1828	-.0685	-.0459
120.000			.6713	.1754	-.0663	-.0516	.0727	.2250	.3165	.0296	.0671	.0238	-.0153	-.0057	.0352
135.000								.1817		.1922		.0112		-.0323	
150.000			.6943	.1969	-.0632	-.0607	.0075	.1518	.2280	.3397	.2064	-.0370	-.1679	-.1469	-.0551
165.000				.1687	-.1114	-.1065	-.0390	.0979	.1957	.3255	.1667	-.0492	-.1558	-.1309	-.0369
180.000	.9537	1.0020	.5789	.1068	-.1611	-.1481	-.0740	.0544	.1707	.2860	.0874	-.1905	-.2299	-.1952	-.0895
270.000		.513							.2661						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0754	-.1160	-.3731
30.000	-.0970	-.1056	-.3074
60.000	-.0515	-.0826	-.1567
90.000	-.1339	-.2468	
120.000	.0550	-.0729	-.0481
135.000	.0587	-.0865	-.1496
150.000	-.0092	-.1388	-.0137
165.000	-.0001	-.1030	-.3796
180.000	-.0399	-.1386	-.4195

ALPHAT(1) = -8.320 BETAT (2) = -4.070

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0090	.5574	.1304	-.3716	-.4501	-.3611	-.1894	-.0777	-.0715	-.1563	-.2378	-.1652	-.0723	-.0407	-.0441
30.000			.1787	-.3144	-.5029	-.3944	-.2387	-.1305	-.1547	-.2556	-.3729	-.1973	-.0876	-.0585	-.0566
60.000			.2863	-.2143	-.4086	-.3311	-.2008	-.1068	-.2098	-.4737	-.6584	-.3495	-.0641	-.0167	-.0151
90.000		.0451	.4310	-.0673	-.2836	-.2046	-.0056	.1724	.2301		-.6365	-.7110	-.2120	-.0777	-.0374
120.000			.5664	.0713	-.1932	-.1517	.0122	.1902	.3110	.0208	.0021	-.0607	-.0868	-.0489	.0014
135.000								.1525		.1592		-.0569		-.0707	
150.000			.5749	.1267	-.1614	-.1406	-.0234	.1341	.2232	.0347	.0272	-.0300	-.2106	-.1587	-.0747

ARC11-718 IA14 OB+T12+912NOS EXTERNAL TANK (RB1743)

ALPHAT(1) = -8.320 BETAT (2) = -4.070

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
165.000				.1219	-.1656	-.1544	-.0357	.1096	.2070	.3249	.1133	-.1098	-.2100	-.1454	-.0365
180.000	1.0090	1.0220	.6075	.0931	-.1884	-.1737	-.0401	.0976	.1944	.3070	.1052	-.2071	-.2336	-.1495	-.0602
270.000		.6269							.2396						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0485	-.0963	-.3829
30.000	-.0804	-.0858	-.3441
60.000	-.0409	-.0563	-.1787
90.000	-.0654	-.1129	
120.000	.0223	-.1275	-.1201
135.000	.0203	-.1465	-.2146
150.000	-.0494	-.2103	-.0951
165.000	-.0064	-.1559	-.3780
180.000	-.0258	-.1755	-.4255

ALPHAT(1) = -8.290 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1150	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.0340	.5807	.1374	-.3672	-.4458	-.3489	-.1805	-.0673	-.0618	-.1501	-.2304	-.1634	-.0532	-.0176	-.0198
30.000			.1510	-.3492	-.4343	-.3467	-.1831	-.0758	-.0886	-.2127	-.3339	-.2189	-.0620	-.0465	-.0379
60.000			.2115	-.2893	-.4133	-.3055	-.1580	-.0595	-.1472	-.4095	-.6294	-.3858	-.0672	-.0232	-.0180
90.000		.7462	.3166	-.1828	-.3570	-.2344	-.0207	.1709	.2383		-.5103	-.7434	-.2008	-.0665	-.0281
120.000			.4512	-.0493	-.2884	-.2235	-.0320	.1663	.3077	.0103	-.0604	-.1464	-.1491	-.0806	-.0143
135.000								.1263		.1384		-.1458		-.1014	
150.000			.5537	.0447	-.2300	-.2011	-.0566	.1093	.2116	.2658	-.1251	-.2159	-.2905	-.1781	-.1135
165.000				.0885	-.2012	-.1827	-.0489	.1001	.2025	.3151	.0397	-.1790	-.2502	-.1441	-.0425
180.000	1.0340	1.0240	.6137	.0905	-.1899	-.1735	-.0366	.1052	.2070	.3094	.1116	-.1998	-.2639	-.1455	-.0318
270.000		.7401							.2309						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0419	-.0921	-.3792
30.000	-.0477	-.0851	-.3614
60.000	-.0338	-.0661	-.2330
90.000	-.0383	-.0930	
120.000	-.0068	-.1721	-.2293
135.000	-.0169	-.1907	-.3034
150.000	-.1055	-.2769	-.2301

ARC11-716 IA14 OL+T12+S12N25 EXTERNAL TANK (RB1T43)

ALPHAT(1) = -8.290 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
165.000	-.0265	-.1887	-.3505
180.000	-.0180	-.1790	-.3984

ALPHAT(1) = -8.370 BETAT (4) = 4.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0075	.5565	.1311	-.3786	-.4880	-.3628	-.1915	-.0790	-.0738	-.1595	-.2374	-.1562	-.0720	-.0392	-.0418
30.000			.1138	-.3873	-.4037	-.3180	-.1461	-.0367	-.0405	-.1699	-.2933	-.1929	-.0492	-.0284	-.0350
60.000			.1295	-.3596	-.3803	-.2731	-.1073	-.0066	-.0817	-.3453	-.6138	-.3648	-.0458	-.0143	-.0249
90.000		.6268	.1975	-.2902	-.3764	-.2392	-.0121	.1759	.2567		-.5042	-.6842	-.1759	-.0481	-.0257
120.000			.3236	-.1699	-.3686	-.2748	-.0670	.1390	.3037	.0151	-.1174	-.1967	-.1777	-.1021	-.0502
135.000								.0839		.1080		-.2206		-.1539	
150.000			.4900	-.0466	-.3036	-.2608	-.1079	.0630	.1875	.2108	-.2829	-.4298	-.4033	-.2197	-.1499
165.000				.0445	-.2429	-.2158	-.0838	.0630	.1792	.2735	-.0071	-.1939	-.2457	-.1498	-.0806
180.000	1.0070	1.0150	.5944	.0881	-.2034	-.1825	-.0458	.0822	.1879	.2910	.1109	-.1871	-.2383	-.1859	-.0824
270.000		.8448							.2187						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0514	-.0977	-.3800
30.000	-.0496	-.0928	-.3854
60.000	-.0393	-.0746	-.2647
90.000	-.0367	-.1088	
120.000	-.0494	-.2116	-.3370
135.000	-.0807	-.2279	-.4060
150.000	.1633	-.3447	-.3591
165.000	-.0629	-.2175	-.4365
180.000	-.0668	-.2090	-.5037

ARC11-716 IA14 OL+T12+S12NES EXTERNAL TANK (RB1T43)

ALPHAT(1) = -0.420 BETAT (1) = 8.220

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9494	.4981	.0916	-.4043	-.5858	-.3874	-.2307	-.1237	-.1079	-.1810	-.2393	-.1731	-.1090	-.0990	-.0741
30.000			.0525	-.4461	-.3829	-.2992	-.1337	-.0249	-.0252	-.1510	-.2736	-.1996	-.0647	-.0575	-.0713
60.000			.0541	-.4502	-.3406	-.2329	-.0676	.0304	-.0369	-.3062	-.5932	-.3412	-.0515	-.0288	-.0401
90.000		.5101	.0925	-.3918	-.3480	-.2216	-.0043	.1823	.2694		-.5880	-.5725	-.1569	-.0496	-.0413
120.000			.1941	-.2967	-.4307	-.3048	-.0910	.1164	.2929	.0048	-.1612	-.2359	-.2221	-.1771	-.1245
135.000								.0376		.0698		-.2997		-.2401	
150.000			.3410	-.1555	-.3926	-.3225	-.1615	.0052	.1439	.1383	-.3829	-.5302	-.5035	-.2979	-.2122
165.000				-.0239	-.5001	-.2774	-.1340	.0025	.1245	.1944	-.0827	-.2377	-.2712	-.2514	-.1681
180.000	.9494	.9211	.5671	.0565	-.2234	-.2163	-.0762	.0416	.1459	.2327	.0817	-.1910	-.3205	-.2830	-.1679
270.000		.9319							.2164						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0790	-.1200	-.3848
30.000	-.0748	-.1054	-.3886
60.000	-.0567	-.0875	-.2532
90.000	-.0722	-.1666	
120.000	-.1106	-.2354	-.3567
135.000	-.1082	-.2360	-.4197
150.000	-.2203	-.3735	-.4139
165.000	-.1282	-.2403	-.4657
180.000	-.1474	-.2805	-.5440

ALPHAT(2) = -4.300 BETAT (1) = -8.210

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0170	.6301	.2144	-.2971	-.5490	-.3919	-.2331	-.1170	-.1060	-.1916	-.2104	-.1390	-.0921	-.0808	-.0805
30.000			.3234	-.1540	-.4527	-.4184	-.2471	-.1420	-.1726	-.2856	-.3167	-.1547	-.1116	-.1007	-.0816
60.000			.4662	-.0452	-.3065	-.2666	-.1401	-.0268	-.0952	-.6010	-.5841	-.2033	-.0097	-.0117	-.0209
90.000		.9945	.5865	.0739	-.1834	-.1326	.0490	.2300	.3340		-.5793	-.5272	-.1190	-.0725	-.0520
120.000			.6276	.1227	-.1551	-.1254	.0197	.1755	.2308	-.1146	-.0024	.0234	-.0190	-.0237	.0226
135.000								.1172		.1140		.0087		-.0441	
150.000			.5953	.0860	-.1987	-.1863	-.0809	.0842	.1408	.2791	.1568	-.0524	-.1725	-.1439	-.0476
165.000				0177	-.2612	-.2453	-.1091	.0336	.1262	.2755	.1391	-.0468	-.1594	-.1520	-.0308
180.000	1.0170	.9145	.4596	-.0505	-.3036	-.2732	-.1188	.0196	.1238	.2541	.0663	-.1765	-.2185	-.1833	-.0754
270.000		.5687							.3935						

X/LT	.7480	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T43)

ALPHAT(2) = -4.300 BETAT (1) = -8.210

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	-.0897	-.1145	-.3781
30.000	-.0837	-.0936	-.3430
60.000	-.0237	-.0116	-.1550
90.000	-.0881	-.1199	
120.000	.0714	.0155	-.0478
135.000	.0740	.0014	-.1361
150.000	.0185	-.0650	.0090
165.000	.0258	-.0413	-.3562
180.000	-.0023	-.0780	-.3980

ALPHAT(2) = -4.280 BETAT (2) = -4.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0090	.6772	.2394	-.2792	-.4609	-.3759	-.2004	-.0767	-.0695	-.1669	-.1861	-.1179	-.0641	-.0464	-.0442
30.000			.2982	-.2183	-.4350	-.3723	-.2038	-.0890	-.1049	-.2422	-.2876	-.1516	-.0741	-.0723	-.0360
60.000			.3862	-.1315	-.3503	-.2796	-.1261	-.0028	-.0605	-.1431	-.3639	-.2663	-.0269	-.0147	-.0218
90.000		.9007	.4707	-.0418	-.2630	-.1850	.0234	.2186	.3343		-.5627	-.5718	-.1104	-.0498	-.0338
120.000			.5294	.0164	-.2279	-.1799	-.0100	.1621	.2369	-.1322	-.0647	-.0565	-.0903	-.0648	-.0110
135.000								.1127		.0949		-.0777		-.0873	
150.000			.5434	.0227	-.2401	-.2102	-.0661	.0893	.1615	.2521	.0228	-.0416	-.2005	-.1600	-.0745
165.000				.0023	-.2577	-.2339	-.0892	.0561	.1482	.2785	.0967	-.1095	-.2029	-.1481	-.0346
180.000	1.0080	.9305	.4861	-.0335	-.2834	-.2450	-.0873	.0619	.1452	.2656	.0873	-.1380	-.2191	-.1513	-.0631
270.000		.6865							.3620						

X/LT	.7480	.8530	.9280
PHI			
.030	-.0493	-.0837	-.3612
30.000	-.0479	-.0666	-.3460
60.000	-.0260	-.0255	-.1836
90.000	-.0360	-.0926	
120.000	.0319	-.0377	-.0978
135.000	.0321	-.0610	-.1890
150.000	-.0198	-.1241	-.0594
165.000	.0115	-.0832	-.3461
180.000	-.0034	-.1032	-.4099

ARC11-716 IA14 O6+T12+S12N25 EXTERNAL TANK (RB1T43)

ALPHAT(2) = -4.000 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0090	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0980	.7012	.2561	-.2636	-.4909	-.3663	-.1861	-.0577	-.0506	-.1422	-.1887	-.1244	-.0554	-.0337	-.0236
30.000			.2702	-.2525	-.4553	-.3443	-.1655	-.0396	-.0492	-.2051	-.2552	-.1553	-.0622	-.0425	-.0366
60.000			.3049	-.2190	-.3768	-.2788	-.1014	.0355	-.0106	-.4007	-.6077	-.2920	-.0152	-.0148	-.0166
90.000		.8053	.3550	-.1615	-.3258	-.2146	.0190	.2206	.3534		-.5525	-.4534	-.0242	-.0258	-.0176
120.000			.4206	-.0883	-.3015	-.2202	-.0296	.1513	.2502	-.1233	-.1286	-.1312	-.1278	-.0817	-.0265
135.000								.1059		.0801		-.1360		-.1127	
150.000			.4724	-.0435	-.2841	-.2413	-.0815	.0819	.1703	.2207	-.1504	-.1889	-.2723	-.1892	-.1095
165.000				-.0260	-.2823	-.2199	-.0861	.0593	.1620	.2703	.0241	-.1623	-.2362	-.1423	-.0529
180.000	1.3980	.9360	.4939	-.0246	-.2852	-.2505	-.0738	.0656	.1594	.2602	.0964	-.1841	-.2406	-.1417	-.0371
270.000		.8021							.3480						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0323	-.0725	-.3536
30.000	-.0403	-.0592	-.3321
60.000	-.0287	-.0343	-.2138
90.000	-.0147	-.0373	
120.000	.0065	-.0785	-.1961
135.000	.0045	-.0990	-.2738
150.000	-.0660	-.1827	-.1853
165.000	-.0076	-.1167	-.3221
180.000	-.0036	-.1092	-.3699

ALPHAT(2) = -4.240 BETAT (4) = 4.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0890	.6758	.2395	-.2776	-.4757	-.3746	-.2012	-.0752	-.0699	-.1636	-.1964	-.1275	-.0631	-.0429	-.0418
30.000			.2093	-.3074	-.4558	-.3293	-.1512	-.0228	-.0193	-.1940	-.2318	-.1243	-.0667	-.0555	-.0462
60.000			.2066	-.3068	-.3818	-.2627	-.0738	.0629	.0307	-.4379	-.5824	-.2282	-.0575	-.0327	-.0241
90.000		.6853	.2371	-.2665	-.3467	-.2121	.0240	.2270	.3711		-.5486	-.1211	-.0527	-.0587	-.0695
120.000			.2990	-.2016	-.3562	-.2539	-.0409	.1490	.2587	-.1325	-.1440	-.1305	-.1511	-.0952	-.0458
135.000								.0883		.0556		-.1822		-.1385	
150.000			.3837	-.1332	-.3523	-.2840	-.1048	.0590	.1655	.1836	-.2852	-.3947	-.3941	-.2325	-.1340
165.000				-.0641	-.3195	-.2762	-.1106	.0358	.1463	.2443	-.0305	-.1928	-.2302	-.1459	-.0774
180.000	1.0690	.9336	.4848	-.0321	-.2883	-.2524	-.0883	.0422	.1461	.2443	.0893	-.1836	-.2220	-.1851	-.0806
270.000		.9058							.3332						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25 EXTERNAL TANK (RB1T43)

ALPHAT(2) = -4.240 BETAT (4) = 4.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0506	-.0819	-.3614
30.000	-.0448	-.0712	-.3570
60.000	-.0229	-.0386	-.1843
90.000	-.0438	-.0988	
120.000	-.0370	-.1350	-.2886
135.000	-.0390	-.1491	-.3582
150.000	-.1175	-.2499	-.3260
165.000	-.0376	-.1429	-.4093
180.000	-.0370	-.1406	-.4840

ALPHAT(2) = -4.260 BETAT (5) = 8.210

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0050	.6127	.2011	-.3042	-.5317	-.4130	-.2431	-.1250	-.1083	-.1861	-.2108	-.1513	-.0980	-.0907	-.0945
30.000			.1275	-.3647	-.4321	-.3318	-.1530	-.0229	-.0089	-.1815	-.2211	-.1268	-.0799	-.0855	-.0722
60.000			.1085	-.3868	-.3581	-.2403	-.0558	.0828	.0618	-.4033	-.5277	-.2123	-.0831	-.0638	-.0468
90.000		.5648	.1222	-.3651	-.3385	-.1936	.0369	.2251	.3914		-.5213	-.0205	-.0333	-.0999	-.1585
120.000			.1956	-.3040	-.3909	-.2641	-.0494	.1401	.2533	-.1232	-.1952	-.1746	-.1830	-.1565	-.1168
135.000								.0646		.0343		-.2539		-.2098	
150.000			.2799	-.2224	-.4062	-.3145	-.1393	.0259	.1389	.1276	-.3848	-.4888	-.4508	-.2710	-.1823
165.000				-.1355	-.3707	-.3127	-.1529	-.0095	.1043	.1742	-.0954	-.2286	-.2531	-.2390	-.1418
180.000	1.0050	.8286	.4502	-.0618	-.3202	-.2864	-.1228	-.0012	.1032	.1883	.0639	-.1858	-.3051	-.2736	-.1532
270.000		.9885							.3226						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0860	-.1187	-.3842
30.000	-.0627	-.0839	-.3581
60.000	-.0443	-.0668	-.1748
90.000	-.1292	-.1974	
120.000	-.0876	-.1544	-.2886
135.000	-.0773	-.1645	-.3593
150.000	-.1729	-.2906	-.3593
165.000	-.0867	-.1738	-.4256
180.000	-.1108	-.2006	-.5132

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T43)

ALPHAT(3) = -.600 BETAT (1) = -8.240

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0330	.7213	.3160	-.2015	-.4804	-.4089	-.2308	-.1054	-.0876	-.1629	-.1858	-.1343	-.1033	-.0922	-.0832
30.000			.4347	-.0779	-.3686	-.3524	-.2048	-.0832	-.1023	-.2344	-.2349	-.1305	-.0894	-.0784	-.0594
60.000			.5470	.0283	-.2381	-.2124	-.0753	.0590	.0254	-.5879	-.5209	-.0783	.0246	.0009	-.0050
90.000		1.0150	.6006	.0906	-.1712	-.1213	.0628	.2453	.3723		-.6171	.0360	.0200	-.0272	-.0248
120.000			.5704	.0658	-.1959	-.1698	-.0240	.1151	.1371	-.1937	-.1065	.0840	.0101	-.0176	.0206
135.000								.0525		.0533		.0353		-.0387	
150.000			.4930	-.0149	-.2744	-.2508	-.1189	.0224	.0666	.2283	.1214	-.0267	-.1643	-.1268	-.0363
165.000				-.0862	-.3366	-.3047	-.1467	-.0105	.0741	.2342	.1245	-.0181	-.1408	-.1444	-.0272
180.000	1.0330	.8237	.3519	-.1519	-.3725	-.3106	-.1358	.0002	.0882	.2256	.0603	-.1507	-.2027	-.1782	-.0689
270.000		.5864							.4431						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0828	-.1115	-.3546
30.000	-.0505	-.0642	-.3218
60.000	-.0072	.0008	-.1621
90.000	.0018	-.0153	
120.000	.0886	.0678	-.0798
135.000	.0944	.0557	-.1498
150.000	.0461	-.0195	-.0042
165.000	.0599	-.0002	-.3365
180.000	.0257	-.0376	-.3827

ALPHAT(3) = -.600 BETAT (2) = -5.150

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0850	.7738	.3429	-.1778	-.4395	-.3802	-.2051	-.0737	-.0561	-.1479	-.1666	-.1094	-.0692	-.0604	-.0506
30.000			.4126	-.1076	-.3843	-.3396	-.1772	-.0531	-.0611	-.2326	-.2105	-.1157	-.0721	-.0618	-.0459
60.000			.4859	-.0422	-.2913	-.2435	-.0793	.0629	.0448	-.6329	-.5349	-.1161	.0125	-.0005	-.0098
90.000		.9474	.5127	-.0040	-.2361	-.1643	.0395	.2375	.3758		-.6435	.0935	.0252	-.0514	-.0453
120.000			.4994	-.0151	-.2594	-.1968	-.0346	.1182	.1528	-.2953	-.1225	.0417	-.0342	-.0580	-.0092
135.000								.0663		.0330		-.0186		-.0742	
150.000			.4576	-.0549	-.3062	-.2592	-.1091	.0385	.0927	.2116	.0885	-.0433	-.1661	-.1537	-.0537
165.000				-.1020	-.3443	-.2935	-.1242	.0196	.0988	.2420	.1085	-.0677	-.1541	-.1412	-.0252
180.000	1.0850	.8366	.3756	-.1437	-.3586	-.2972	-.1109	.0361	.1111	.2340	.0819	-.1523	-.1891	-.1504	-.0511
270.000		.6776							.4212						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T43)

ALPHAT(3) = -.600 BETAT (2) = -5.150

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0455	-.0722	-.3122
30.000	-.0342	-.0447	-.2975
60.000	-.0012	.0052	-.1643
90.000	.0067	.0280	
120.000	.0532	.0266	-.1382
135.000	.0621	.0112	-.1957
150.000	.0199	-.0581	-.0396
165.000	.0464	-.0263	-.3598
180.000	.0256	-.0518	-.4008

ALPHAT(3) = -.600 BETAT (3) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1100	.7995	.3532	-.1717	-.4172	-.3578	-.1813	-.0528	-.0349	-.1406	-.1485	-.0909	-.0540	-.0316	-.0283
30.000			.3597	-.1683	-.4009	-.3337	-.1571	-.0216	-.0096	-.2123	-.1835	-.1024	-.0594	-.0494	-.0299
60.000			.3584	-.1628	-.3516	-.2594	-.0769	.0826	.0863	-.6223	-.5110	-.1580	-.0199	-.0236	-.0181
90.000		.8187	.3691	-.1437	-.3143	-.2021	.0266	.2350	.3954		-.6675	.0820	-.0448	-.1215	-.0960
120.000			.3811	-.1344	-.3263	-.2353	-.0390	.1295	.1838	-.3154	-.1473	-.0321	-.0976	-.0982	-.0362
135.000								.0812		.0180		-.0817		-.1074	
150.000			.3917	-.1322	-.3390	-.2699	-.0998	.0594	.1248	.1761	-.1563	-.1526	-.2329	-.1887	-.1002
165.000				-.1268	-.3394	-.2842	-.1102	.0376	.1242	.2390	.0233	-.1227	-.1855	-.1431	-.0490
180.000	1.1100	.8377	.3931	-.1291	-.3465	-.2778	-.0974	.0376	.1250	.2331	.0938	-.1462	-.1937	-.1327	-.0328
270.000		.8193							.3898						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0248	-.0498	-.3107
30.000	-.0226	-.0356	-.2914
60.000	-.0085	-.0091	-.1546
90.000	-.0259	-.0097	
120.000	.0164	-.0290	-.2069
135.000	.0188	-.0446	-.2715
150.000	-.0396	-.1320	-.1904
165.000	.0148	-.0645	-.3608
180.000	.0201	-.0615	-.4167

ARC11-716 IA14 O6+T12+S12N25 EXTERNAL TANK (RB1T43)

ALPHAT(3) = -.650 BETAT (4) = 4.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0920	.7759	.3436	-.1740	-.4333	-.3788	-.1951	-.0647	-.0477	-.1490	-.1548	-.1066	-.0689	-.0439	-.0379
30.000			.2879	-.2281	-.4325	-.3383	-.1529	-.0141	.0097	-.1876	-.1808	-.1080	-.0701	-.0805	-.0447
60.000			.2575	-.2537	-.3757	-.2600	-.0641	.0962	.1157	-.5642	-.4726	-.1620	-.0425	-.0407	-.0363
90.000		.7089	.2530	-.2482	-.3376	-.2008	.0329	.2418	.4164		-.6264	.0744	-.0853	-.1571	-.1238
120.000			.2755	-.2281	-.3507	-.2334	-.0318	.1360	.2075	-.2890	-.1510	-.0727	-.1294	-.1162	-.0586
135.000								.0867		.0045		-.1242		-.1367	
150.000			.3168	-.1974	-.3702	-.2811	-.1033	.0576	.1381	.1448	-.2362	-.3140	-.3544	-.2511	-.1122
165.000				-.1595	-.3763	-.2946	-.1207	.0267	.1207	.2171	-.0323	-.1566	-.1934	-.1381	-.0678
180.000	1.0920	.8446	.3830	-.1380	-.3673	-.2868	-.1132	.0250	.1146	.2202	.0908	-.1466	-.1860	-.1750	-.0688
270.000		.9226							.3775						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0361	-.0622	-.2999
30.000	-.0355	-.0481	-.3150
60.000	-.0224	-.0237	-.1549
90.000	-.0501	-.0564	
120.000	-.0164	-.0763	-.2419
135.000	-.0172	-.0971	-.3234
150.000	-.0860	-.1945	-.2829
165.000	-.0121	-.0997	-.3865
180.000	-.0119	-.0969	-.4733

ALPHAT(3) = -.590 BETAT (5) = 8.230

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0300	.7164	.3051	-.2102	-.4804	-.4101	-.2364	-.1124	-.0941	-.1760	-.1844	-.1395	-.1025	-.0936	-.0838
30.000			.2014	-.3054	-.4806	-.3543	-.1671	-.0271	.0082	-.1672	-.1828	-.1257	-.0818	-.0734	-.0661
60.000			.1565	-.3461	-.3663	-.2450	-.0490	.1066	.1229	-.5118	-.4242	-.1643	-.0766	-.0683	-.0515
90.000		.5890	.1408	-.3497	-.3257	-.1802	.0453	.2497	.4400		-.5633	.0293	-.1319	-.1942	-.1572
120.000			.1631	-.3223	-.3555	-.2336	-.0243	.1429	.2134	-.2577	-.1858	-.1199	-.1724	-.1719	-.1123
135.000								.0800		-.0027		-.1824		-.1916	
150.000			.2257	-.2769	-.4039	-.2999	-.1146	.0453	.1373	.1198	-.3831	-.3996	-.4350	-.2742	-.1668
165.000				-.2126	-.4103	-.3246	-.1521	-.0063	.0871	.1629	-.0764	-.2080	-.2387	-.2303	-.1231
180.000	1.0300	.7440	.3543	-.1618	-.3855	-.3207	-.1392	-.0240	.0713	.1710	.0602	-.1669	-.2806	-.2566	-.1341
270.000		1.0130							.3681						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25 EXTERNAL TANK (RB1T43)

ALPHAT(3) = -.990 BETAT (5) = 8.230

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0882	-.1106	-.3489
30.000	-.0554	-.0699	-.3214
60.000	-.0467	-.0560	-.1767
90.000	-.1249	-.1303	
120.000	-.0540	-.1013	-.2412
135.000	-.0544	-.1162	-.3278
150.000	-.1379	-.2297	-.3210
165.000	-.0657	-.1335	-.3925
180.000	-.0842	-.1604	-.4898

ALPHAT(4) = 4.050 BETAT (1) = -8.260

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0200	.8321	.4365	-.0851	-.3849	-.3756	-.2207	-.0868	-.0550	-.1088	-.1254	-.0971	-.0801	-.0807	-.0722
30.000			.5615	.0419	-.2696	-.2701	-.1443	-.0186	-.0130	-.1493	-.1188	-.0626	-.0456	-.0462	-.0352
60.000			.6215	.1079	-.1813	-.1586	-.0204	.1304	.1417	-.5182	-.2427	-.0330	.0185	.0141	.0100
90.000		.9934	.5881	.0776	-.1774	-.1354	.0529	.2293	.3451		-.6068	-.0943	-.0199	-.0516	-.0261
120.000			.4753	-.0281	-.2768	-.2439	-.0949	.0157	.0004	-.1579	-.4205	.0380	.0489	.0120	.0340
135.000								-.0402		.0075		-.0160		-.0157	
150.000			.3639	-.1466	-.3806	-.3343	-.1869	-.0552	-.0190	.1816	.0371	-.0733	-.1257	-.1147	-.0266
165.000				-.2185	-.4333	-.3535	-.1842	-.0538	.0308	.1936	.0780	-.0306	-.1008	-.1294	-.0062
180.000	1.0200	.8984	.2282	-.2707	-.4250	-.3374	-.1412	-.0116	.0681	.1879	.0351	-.1598	-.1760	-.1532	-.0544
270.000		.5704							.4244						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0760	-.1011	-.3225
30.000	-.0230	-.0307	-.2929
60.000	.0272	.0395	-.1493
90.000	.0202	.0201	
120.000	.1172	.1211	-.0707
135.000	.1281	.1076	-.1354
150.000	.0758	.0235	.0150
165.000	.0954	.0313	-.3155
180.000	.0525	-.0080	-.3623

ARC11-716 IA14 OL+T12+S12N25 EXTERNAL TANK (RB1T43)

ALPHAT(4) = 3.990 BETAT (2) = -4.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0780	.8937	.4759	-.0558	-.3569	-.3342	-.1786	-.0406	-.0072	-.0857	-.0866	-.0602	-.0415	-.0333	-.0279
30.000			.5253	-.0030	-.3068	-.2833	-.1349	.0051	.0221	-.1441	-.0965	-.0525	-.0358	-.0305	-.0173
60.000			.5222	-.0024	-.2617	-.2120	-.0462	.1252	.1605	-.5302	-.2143	-.0571	-.0149	-.0161	-.0033
90.000		.9000	.4704	-.0408	-.2690	-.1880	.0226	.2220	.3541		-.6840	-.1196	-.0772	-.0807	-.0433
120.000			.3916	-.1253	-.3257	-.2566	-.0900	.0414	.0367	-.2009	-.4307	-.0367	-.0209	-.0453	-.0032
135.000								.0004		.0091		-.0985		-.0633	
150.000			.3219	-.1877	-.3789	-.3086	-.1520	-.0103	.0311	.1740	.0195	-.1111	-.1407	-.1425	-.0432
165.000				-.2291	-.3999	-.3232	-.1460	-.0099	.0671	.2033	.0663	-.0873	-.1344	-.1153	-.0076
180.000	1.0780	.7165	.2499	-.2621	-.4073	-.3077	-.1207	.0183	.0905	.2065	.0702	-.1615	-.1668	-.1151	-.0316
270.000		.6908							.3935						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0214	-.0481	-.2772
30.000	-.0062	-.0158	-.2644
60.000	.0070	.0257	-.1397
90.000	.0142	.0316	
120.000	.0786	.0764	-.1139
135.000	.0846	.0578	-.1914
150.000	.0435	-.0196	-.0429
165.000	.0772	.0044	-.3466
180.000	.0580	-.0165	-.3889

ALPHAT(4) = 4.000 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.	1.0970	.9149	.4825	-.0497	-.3470	-.3204	-.1618	-.0239	.0053	-.0756	-.0798	-.0489	-.0285	-.0239	-.0128
30.000			.4677	-.0663	-.3456	-.3082	-.1397	.0100	.0396	-.1340	-.0956	-.0557	-.0311	-.0269	-.0174
60.000			.4206	-.1112	-.3311	-.2561	-.0599	.1230	.1749	-.4827	-.2071	-.0591	-.0359	-.0329	-.0188
90.000		.8028	.3589	-.1609	-.3298	-.2142	.0144	.2258	.3726		-.7382	-.1388	-.1036	-.0953	-.0467
120.000			.3077	-.1996	-.3551	-.2594	-.0702	.0734	.0810	-.2641	-.3956	-.0996	-.0780	-.0766	-.0097
135.000								.0380		.0001		-.1258		-.0903	
150.000			.2774	-.2336	-.3827	-.2951	-.1195	.0239	.0742	.1493	-.1620	-.1760	-.1930	-.1630	-.0770
165.000				-.2392	-.3944	-.3090	-.1236	.0144	.0898	.2069	.0100	-.1356	-.1594	-.1210	-.0256
180.000	1.0970	.7149	.2661	-.2551	-.3993	-.3104	-.1159	.0152	.0932	.2049	.0825	-.1560	-.1746	-.1126	-.0109
270.000		.8032							.3728						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T43)

ALPHAT(4) = 4.000 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0099	-.0273	-.2648
30.000	-.0109	-.0142	-.2668
60.000	-.0061	.0075	-.1523
90.000	.0047	.0187	
120.000	.0581	.0329	-.1634
135.000	.0555	.0169	-.2437
150.000	.0021	-.0597	-.1541
165.000	.0501	-.0078	-.3286
180.000	.0562	-.0074	-.3745

ALPHAT(4) = 4.100 BETAT (4) = 4.200

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0790	.8891	.4619	-.0583	-.3563	-.3409	-.1780	-.0443	-.0111	-.0932	-.0922	-.0661	-.0440	-.0360	-.0302
30.000			.3767	-.1393	-.4017	-.3472	-.1591	-.0111	.0418	-.1280	-.1140	-.0687	-.0504	-.0426	-.0372
60.000			.3020	-.2143	-.3948	-.2752	-.0707	.1152	.1868	-.4302	-.1748	-.0542	-.0580	-.0514	-.0376
90.000		.6907	.2393	-.2625	-.3590	-.2170	.0189	.2283	.3959		-.7325	-.1173	-.1078	-.0940	-.0436
120.000			.2102	-.2899	-.3635	-.2441	-.0486	.0967	.1222	-.2911	-.3449	-.1598	-.1249	-.0988	-.0314
135.000								.0805		-.0186		-.1722		-.1225	
150.000			.2218	-.2873	-.3889	-.2825	-.1039	.0430	.1010	.1248	-.2483	-.3212	-.3218	-.2207	-.1063
165.000				-.2750	-.4138	-.3063	-.1299	.0100	.0896	.1916	-.0454	-.1634	-.1711	-.1247	-.0497
180.000	1.0790	.7189	.2506	-.2645	-.4169	-.3183	-.1353	-.0031	.0745	.1892	.0828	-.1504	-.1599	-.1542	-.0575
270.000		.9106							.3590						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0260	-.0443	-.2741
30.000	-.0231	-.0341	-.2854
60.000	-.0199	-.0194	-.1847
90.000	-.0057	-.0071	
120.000	.0234	-.0280	-.2228
135.000	.0141	-.0508	-.3152
150.000	-.0467	-.1450	-.2641
165.000	.0127	-.0603	-.3611
180.000	.0133	-.0671	-.4588

ARC11-716 IA14 O1+T12-S12NE5 EXTERNAL TANK (RB1T43)

ALPHAT(4) = 4.130 BETAT (5) = 8.300

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0130	.6319	.4345	-.0810	-.3837	-.3768	-.2238	-.0877	-.0577	-.1232	-.1311	-.1026	-.0856	-.0772	-.0704
30.000			.2837	-.2210	-.4772	-.3880	-.1973	-.0476	.0227	-.1224	-.1395	-.0842	-.0754	-.0750	-.0679
60.000			.1819	-.3241	-.4068	-.2823	-.0738	.1117	.1883	-.3763	-.1445	-.0516	-.0760	-.0740	-.0623
90.000		.5657	.1254	-.3623	-.3351	-.1922	.0393	.2333	.4221		-.6350	-.0808	-.1078	-.0940	-.0569
120.000			.1148	-.3780	-.3353	-.2146	-.0201	.1216	.1485	-.3103	-.3327	-.2211	-.1723	-.1314	-.0740
135.000								.0774		-.0328		-.2037		-.1606	
150.000			.1343	-.3593	-.3831	-.2737	-.0940	.0496	.1105	.0952	-.3455	-.4099	-.3599	-.2631	-.1502
165.000				-.3228	-.4271	-.3214	-.1429	-.0108	.0764	.1499	-.0838	-.2101	-.2339	-.2173	-.1221
180.000	1.0130	.6257	.2217	-.2848	-.4428	-.3406	-.1556	-.0396	.0425	.1342	.0364	-.1681	-.2700	-.2544	-.1312
270.000		.9976							.3484						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0744	-.0998	-.3266
30.000	-.0998	-.0702	-.3098
60.000	-.0495	-.0406	-.2079
90.000	-.0194	-.0164	
120.000	-.0208	-.0631	-.2533
135.000	-.0278	-.0780	-.3306
150.000	-.1056	-.2009	-.3076
165.000	-.0434	-.1012	-.3694
180.000	-.0650	-.1387	-.4667

ALPHAT(5) = 8.140 BETAT (1) = -8.260

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9663	.9191	.5478	.0332	-.2914	-.2988	-.1835	-.0543	-.0065	-.0492	-.0639	-.0601	-.0553	-.0569	-.0326
30.000			.6691	.1555	-.1693	-.1845	-.0801	.0461	.0683	-.0532	-.0172	-.0016	.0048	-.0050	.0044
60.000			.6716	.1660	-.1294	-.1162	.0132	.1793	.2341	-.2558	-.0449	.0520	.0368	.0270	.0297
90.000		.9356	.5539	.0556	-.2058	-.1566	.0178	.1850	.2553		-.4324	-.0136	-.0030	-.0323	-.0044
120.000			.3708	-.1225	-.3594	-.3175	-.1832	-.0898	-.1541	-.1945	-.5473	-.0388	.0841	.0399	.0563
135.000								-.1337		-.0462		-.0733		.0140	
150.000			.2408	-.2610	-.4832	-.3876	-.2486	-.1271	-.0977	.1326	-.0371	-.1198	-.0813	-.0894	-.0121
165.000				-.3339	-.4867	-.3821	-.2050	-.0771	.0023	.1638	.0501	-.0416	-.0617	-.1138	.0173
180.000	.9663	.5787	.1153	-.3768	-.4124	-.3240	-.1382	-.0103	.0608	.1677	.0230	-.1590	-.1450	-.1268	-.0282
270.000		.5130							.3331						

X/LT	.7480	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25 EXTERNAL TANK (RB1T43)

ALPHAT(5) = 8.140 BETAT (1) = -8.260

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.9530	.9280
PHI			
.000	-.0513	-.0768	-.2959
30.000	.0141	-.0012	-.2994
60.000	.0551	.0643	-.1385
90.000	.0466	.0272	
120.000	.1342	.1520	-.0521
135.000	.1475	.1482	-.1049
150.000	.0911	.0444	.0510
165.000	.1092	.0581	-.2834
180.000	.0757	.0143	-.3419

ALPHAT(5) = 8.160 BETAT (2) = -4.130

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0210	.9893	.5940	.0685	-.2626	-.2690	-.1444	-.0046	.0414	-.0172	-.0261	-.0196	-.0078	-.0110	-.0022
30.000			.6278	.1057	-.2231	-.2190	-.0901	.0494	.0902	-.0459	-.0233	.0055	.0060	-.0018	.0099
60.000			.5669	.0514	-.2395	-.1975	-.0335	.1572	.2355	-.3113	-.0611	.0296	.0139	.0030	.0071
90.000		.8386	.4339	-.0748	-.3059	-.2209	-.0073	.1766	.2578		-.4355	-.0496	-.0629	-.0682	-.0181
120.000			.2904	-.2120	-.4009	-.3141	-.1802	-.0598	-.1034	-.2271	-.5962	-.1130	.0074	-.0096	.0204
135.000								-.0737		-.0252		-.1699		-.0364	
150.000			.2052	-.2981	-.4423	-.3524	-.1929	-.0659	-.0346	.1366	-.0587	-.1659	-.1306	-.1183	-.0264
165.000				-.3422	-.4228	-.3340	-.1588	-.0295	.0480	.1741	.0317	-.1050	-.1064	-.0901	.0052
180.000	1.0210	.5899	.1313	-.3664	-.4136	-.3090	-.1178	.0070	.0725	.1842	.0750	-.1683	-.1412	-.0982	-.0161
270.000		.6313							.2985						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0004	-.0240	-.2461
30.000	.0238	.0128	-.2421
60.000	.0238	.0402	-.1441
90.000	.0291	.0284	
120.000	.0993	.1109	-.0965
135.000	.1096	.0971	-.1654
150.000	.0674	.0142	-.0172
165.000	.1009	.0338	-.3203
180.000	.0818	.0129	-.3649

ARC11-716 IA14 O1+T12+S12NB5 EXTERNAL TANK (RB1T43)

ALPHAT(5) = 8.160 BETAT (5) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0430	1.0060	.9993	.0730	-.2494	-.2567	-.1255	.0109	.0559	-.0072	-.0148	-.0004	.0002	.0032	.0105
30.000			.5520	.0337	-.2805	-.2647	-.1175	.0334	.0901	-.0405	-.0366	-.0118	-.0042	-.0090	-.0010
60.000			.4427	-.0733	-.3319	-.2575	-.0667	.1330	.2409	-.2909	-.0730	.0105	-.0020	-.0098	-.0132
90.000		.7399	.3183	-.1907	-.3632	-.2477	-.0169	.1755	.2751		-.4258	-.0424	-.0684	-.0655	-.0293
120.000			.2162	-.2834	-.3886	-.2942	-.1199	-.0085	-.0398	-.2281	-.5525	-.1718	-.0526	-.0460	.0042
135.000								-.0159		-.0068		-.1876		-.0635	
150.000			.1690	-.3307	-.4047	-.3106	-.1439	-.0097	.0309	.1279	-.1537	-.2088	-.1826	-.1420	-.0583
165.000				-.3450	-.4211	-.3080	-.1339	-.0022	.0713	.1852	-.0025	-.1514	-.1345	-.0940	-.0082
180.000	1.0430	.9906	.1452	-.3544	-.4191	-.3037	-.1222	.0010	.0758	.1924	.0850	-.1778	-.1480	-.0809	.0036
270.000		.7482							.2789						

X/LT	.7460	.8530	.9280
PHI			
.000	.0132	-.0062	-.2266
30.000	.0142	.0051	-.2409
60.000	.0053	.0176	-.1684
90.000	.0190	.0122	
120.000	.0747	.0651	-.1581
135.000	.0725	.0466	-.2276
150.000	.0265	-.0290	-.1250
165.000	.0740	.0213	-.3099
180.000	.0799	.0233	-.3521

ALPHAT(5) = 8.150 BETAT (4) = 4.180

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0230	.9797	.5770	.0585	-.2626	-.2741	-.1482	-.0069	.0369	-.0228	-.0402	-.0240	-.0104	-.0160	-.0083
30.000			.4620	-.0546	-.3481	-.3212	-.1626	-.0065	.0657	-.0542	-.0799	-.0456	-.0366	-.0399	-.0206
60.000			.3204	-.1939	-.4185	-.3116	-.0985	.1152	.2360	-.2453	-.0953	-.0086	-.0172	-.0252	-.0179
90.000		.6284	.1970	-.2964	-.3834	-.2518	-.0138	.1675	.2907		-.3875	.0012	-.0619	-.0587	-.0145
120.000			.1378	-.3666	-.3535	-.2596	-.0775	.0359	.0153	-.2141	-.4865	-.1832	-.1046	-.0738	-.0117
135.000								.0298		.0054		-.2087		-.0886	
150.000			.1177	-.3839	-.3836	-.2784	-.1051	.0179	.0661	.1199	-.2558	-.3039	-.2710	-.1862	-.0983
165.000				-.3768	-.3974	-.3025	-.1254	-.0019	.0758	.1763	-.0569	-.1586	-.1455	-.0975	-.0345
180.000	1.0230	.9916	.1281	-.3701	-.4019	-.3199	-.1363	-.0177	.0614	.1739	.0771	-.1392	-.1363	-.1109	-.0482
270.000		.8601							.2719						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 OL+T12+S12N25 EXTERNAL TANK (RB1T43)

ALPHAT(3) = 0.190 BETAT (4) = 4.180

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	-.0065	-.0222	-.2531
30.000	-.0149	-.0240	-.2660
60.000	-.0143	-.0029	-.1842
90.000	.0070	-.0075	
120.000	.0405	.0024	-.2174
135.000	.0341	-.0174	-.3082
150.000	-.0113	-.1128	-.2521
165.000	.0326	-.0342	-.3494
180.000	.0346	-.0455	-.4389

ALPHAT(3) = 0.220 BETAT (5) = 0.360

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6360
PHI															
.000	.9573	.9227	.5505	.0378	-.2849	-.3048	-.1881	-.0537	-.0138	-.0641	-.0899	-.0755	-.0825	-.0577	-.0349
30.000			.3536	-.1491	-.4402	-.4028	-.2186	-.0632	.0300	-.0893	-.1249	-.1095	-.0934	-.0924	-.0770
60.000			.1883	-.3073	-.5207	-.3251	-.1138	.0954	.2367	-.1691	-.1717	-.0803	-.0321	-.0275	-.0280
90.000		.9007	.0835	-.3947	-.3428	-.2162	.0110	.1975	.3259		-.5209	-.1277	-.1344	-.1566	-.1112
120.000			.0498	-.4431	-.3210	-.2129	-.0325	.0841	.0782	-.1325	-.4949	-.1986	-.1002	-.1052	-.0809
135.000								.0643		.0289		-.2529		-.1224	
150.000			.0526	-.4409	-.3492	-.2521	-.0791	.0467	.0953	.1194	-.3186	-.3782	-.3064	-.2149	-.1071
165.000				-.4137	-.3804	-.2985	-.1287	-.0005	.0738	.1550	-.0937	-.1642	-.1974	-.1803	-.0860
180.000	.9575	.9174	.1080	-.3855	-.4151	-.3378	-.1015	-.0452	.0287	.1265	.0316	-.1428	-.2146	-.2207	-.0952
270.000		.9479							.2602						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0575	-.0788	-.2969
30.000	-.0780	-.0758	-.2977
60.000	-.0162	-.0089	-.1580
90.000	-.0499	-.0071	
120.000	.0091	-.0168	-.2271
135.000	.0009	-.0313	-.3015
150.000	-.0688	-.1411	-.2790
165.000	-.0011	-.0591	-.3572
180.000	-.0343	-.0965	-.4624

ARC11-T18 IA14 O1+T18+S12M25 EXTERNAL TANK (RB1T44) (14 FEB 74)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES
LREF = 38.7390 INCHES YMRP = .0000 INCHES
BREF = 38.7390 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = .900 ELEVON = .000
RUDDER = .000 SPOBRK = .000

ALPHAT(1) = -8.990 BETAT (1) = -8.190

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	.9828	.5457	.1420	-.3658	-.4672	-.4747	-.0480	-.0808	-.0675	-.1837	-.2932	-.1950	-.1077	-.0848	-.0610
30.000			.2291	-.2685	-.4040	-.4009	-.1454	-.1567	-.1986	-.4074	-.4268	-.2427	-.1215	-.1031	-.0734
60.000			.3892	-.1072	-.2613	-.2206	-.2333	-.1203	-.2133	-.5457	-.6912	-.3659	-.0922	.0466	-.0034
90.000		.9614	.5744	.0769	-.1140	-.0611	.0383	.2141	.2739		-.6664	-.7060	-.1309	-.0094	-.0005
120.000			.6962	.1940	-.0297	-.0115	.0895	.2468	.3492	-.0017	.0871	.0312	-.0391	-.0265	.0402
135.000								.2008		.2045		.0155		-.0553	
150.000			.7185	.2136	-.0291	-.0255	.0110	.1701	.2495	.3605	.2366	-.0255	-.1990	-.1639	-.0503
165.000				.2138	-.0694	-.0681	-.0373	.1151	.2173	.3543	.1942	-.0405	-.1929	-.1814	-.0346
180.000	.9828	1.0270	.6082	.1591	-.1150	-.1141	-.0661	.0618	.1990	.3215	.1208	-.1715	-.2270	-.2070	-.0892
270.000		.5521							.3076						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0358	-.0933	-.3057
30.000	-.0808	-.0778	-.2551
60.000	-.0403	-.0646	-.1244
90.000	-.0881	-.1991	
120.000	.0790	-.0583	.0194
135.000	.0826	-.0657	-.0791
150.000	.0196	-.1052	.0311
165.000	.0288	-.0713	-.3316
180.000	-.0098	-.1012	-.3576

ALPHAT(1) = -8.990 BETAT (2) = -4.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.0350	.5924	.1659	-.3432	-.6385	-.5274	-.1108	-.0272	-.0332	-.1707	-.2738	-.1788	-.0749	-.0377	-.0364
30.000			.2141	-.2952	-.6023	-.6061	-.1677	-.0813	-.1155	-.3112	-.3473	-.2295	-.1109	-.0623	-.0400
60.000			.3188	-.1880	-.5039	-.3667	-.1694	-.0651	-.1613	-.4849	-.0772	-.4080	-.1405	.0014	.0200
90.000		.8737	.4628	-.0430	-.3550	-.2266	.0179	.2062	.2726		-.6457	-.7658	-.1784	-.0140	.0166
120.000			.5931	.0893	-.2425	-.1865	.0247	.2209	.3452	-.0020	.0229	-.0541	-.1376	-.0745	.0139
135.000								.1769		.1856		-.0656		-.1087	
150.000			.6618	.1419	-.1950	-.1703	-.0118	.1584	.2551	.3274	.0365	-.0327	-.2639	-.1850	-.0634

ARC11-716 IA14 OL+T12+S12N25 EXTERNAL TANK (RB1T44)

ALPHAT(1) = -0.550 BETAT (2) = -4.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
165.000				.1452	-.1980	-.1832	-.0283	.1357	.2349	.3566	.1353	-.1110	-.2401	-.1882	-.0290
180.000	1.0390	1.0470	.6363	.1131	-.2230	-.2050	-.0338	.1169	.2232	.3411	.1346	-.2100	-.2504	-.1843	-.0619
270.000		.6804							.2842						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0349	-.0702	-.3181
30.000	-.0375	-.0805	-.2651
60.000	-.0142	-.0346	-.1298
90.000	.0001	-.0689	
120.000	.0486	-.1206	-.0667
135.000	.0477	-.1366	-.1536
150.000	-.0126	-.1872	-.0658
165.000	.0199	-.1330	-.3555
180.000	.0011	-.1466	-.3876

ALPHAT(1) = -0.520 BETAT (3) = .020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.0590	.6139	.1743	-.3400	-.6286	-.4775	-.1053	-.0115	-.0218	-.1550	-.2955	-.1780	-.0579	-.0144	-.0021
30.000			.1909	-.3295	-.6167	-.4417	-.1115	-.0218	-.0481	-.2277	-.3806	-.2289	-.0853	-.0435	-.0163
60.000			.2465	-.2653	-.5633	-.2977	-.1024	-.0089	-.0979	-.4077	-.6468	-.4436	-.1200	-.0273	.0138
90.000		.7732	.3520	-.1560	-.4749	-.2285	.0176	.2113	.2848		-.6159	-.7156	-.2302	-.0287	.0195
120.000			.4600	-.0270	-.3527	-.2509	-.0121	.1989	.3467	.0185	-.0463	-.1314	-.2205	-.1046	.0047
135.000								.1528		.1700		-.1282		-.1643	
150.000			.5801	.0646	-.2744	-.1378	-.0418	.1333	.2476	.2989	-.0968	-.2158	-.4012	-.2241	-.0782
165.000				.1095	-.2313	-.2121	-.0343	.1226	.2334	.3468	.0661	-.1673	-.3041	-.1768	-.0270
180.000	1.0990	1.0480	.6389	.1167	-.2249	-.2009	-.0191	.1254	.2310	.3364	.1438	-.2171	-.3613	-.1916	-.0175
270.000		.7702							.2742						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0230	-.0636	-.3271
30.000	-.0282	-.0924	-.2934
60.000	-.0161	-.0314	-.1515
90.000	.0083	-.0568	
120.000	.0246	-.1418	-.1916
135.000	.0183	-.1634	-.2674
150.000	-.0627	-.2527	-.2325

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T41)

ALPHAT(1) = -8.520 BETAT (3) = .020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
165.000	.0077	-.1638	-.3293
180.000	.0081	-.1557	-.3676

ALPHAT(1) = -8.540 BETAT (4) = 4.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0310	.5893	.1655	-.3469	-.6417	-.5113	-.1161	-.0276	-.0377	-.1691	-.2849	-.1740	-.0693	-.0334	-.0281
30.000			.1499	-.3573	-.6354	-.2821	-.0804	.0092	-.0056	-.1762	-.3414	-.2339	-.0641	-.0319	-.0269
60.000			.1681	-.3397	-.6182	-.2077	-.0540	.0366	-.0402	-.3563	-.6026	-.4504	-.0911	-.0202	-.0062
90.000		.6619	.2344	-.2650	-.5681	-.1907	.0256	.2196	.2963		-.5984	-.7550	-.2173	-.0437	.0001
120.000			.3582	-.1479	-.4696	-.2817	-.0352	.1744	.3448	.0356	-.1075	-.1943	-.2342	-.1430	-.0453
135.000								.1161		.1478		-.2153		-.2094	
150.000			.4838	-.0240	-.3629	-.3131	-.0869	.0936	.2244	.2522	-.2629	-.4221	-.4667	-.2505	-.1108
165.000				.0641	-.2795	-.2565	-.0703	.0892	.2089	.3078	.0207	-.1742	-.2803	-.1888	-.0740
180.000	1.0310	1.0420	.6255	.1027	-.2292	-.2113	-.0340	.1062	.2152	.3135	.1392	-.1811	-.3152	-.2172	-.0769
270.000		.8700							.2613						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0356	-.0709	-.3219
30.000	-.0333	-.0682	-.3259
60.000	-.0188	-.0489	-.1969
90.000	-.0108	-.0908	
120.000	-.0234	-.1868	-.3050
135.000	-.0363	-.1951	-.3835
150.000	-.1251	-.3060	-.3588
165.000	-.0384	-.1878	-.4224
180.000	-.0403	-.1804	-.5240

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T44)

ALPHAT(1) = -8.570 BETAT (5) = 8.220

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9770	.5370	.1347	-.3741	-.6597	-.6664	-.1453	-.0639	-.0720	-.1857	-.3136	-.1718	-.1033	-.0797	-.0608
30.000			.0989	-.4002	-.6736	-.2502	-.0765	.0135	.0140	-.1545	-.3432	-.2138	-.0784	-.0483	-.0517
60.000			.0976	-.4036	-.6656	-.1687	-.0289	.0653	.0109	-.3091	-.5919	-.4053	-.0948	-.0221	-.0234
90.000		.5483	.1278	-.3623	-.6441	-.1608	.0320	.2240	.3126		-.5929	-.6519	-.2060	-.0539	-.0340
120.000			.2350	-.2512	-.5680	-.3451	-.0450	.1530	.3376	.0491	-.1471	-.2499	-.2585	-.2026	-.1360
135.000								.0731		.1224		-.3056		-.2807	
150.000			.3799	-.1193	-.4455	-.4349	-.1322	.0381	.1887	.1891	-.3417	-.5100	-.5391	-.3253	-.1971
165.000				.0039	-.3280	-.3252	-.1269	.0295	.1648	.2355	-.0376	-.1992	-.2754	-.2709	-.1825
180.000	.9770	.9540	.5990	.0871	-.2480	-.2394	-.0722	.0654	.1740	.2683	.1225	-.1134	-.3233	-.3050	-.1697
270.000		.9587							.2607						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0588	-.0929	-.3186
30.000	-.0597	-.0844	-.3334
60.000	-.0381	-.0619	-.1984
90.000	-.0597	-.1664	
120.000	-.0837	-.2008	-.3343
135.000	-.0845	-.2017	-.3992
150.000	-.1817	-.3263	-.3912
165.000	-.0991	-.2088	-.4388
180.000	-.1254	-.2281	-.5751

ALPHAT(2) = -4.500 BETAT (1) = -8.230

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0430	.6621	.2494	-.2712	-.5909	-.6346	-.1480	-.0556	-.0607	-.1957	-.2619	-.1605	-.0901	-.0755	-.0731
30.000			.3536	-.1565	-.4970	-.5014	-.2246	-.0920	-.1244	-.4171	-.3461	-.1594	-.1149	-.0909	-.0664
60.000			.4896	-.0235	-.3428	-.2957	-.1289	.0079	-.0479	-.6906	-.6079	-.2578	-.0425	.0101	.0045
90.000		1.0130	.6068	.0896	-.2245	-.1532	.0644	.2584	.3731		-.5929	-.5957	-.1187	-.0293	.0047
120.000			.6488	.1382	-.1895	-.1506	.0303	.1980	.2642	-.2743	.0084	.0331	-.0378	-.0461	.0256
135.000								.1383		.0974		0099		-.0778	
150.000			.6195	.1024	-.2312	-.2120	-.0533	.1068	.1684	.2896	.1851	-.0440	-.2012	-.1702	-.0454
165.000				.0430	-.3000	-.2900	-.0949	.0565	.1507	.2999	.1615	-.0482	-.1801	-.1866	-.0308
180.000	1.0430	.9451	.4936	-.0223	-.3569	-.3307	-.1017	.0386	.1562	.2856	.0914	-.1820	-.2290	-.2107	-.0828
270.000		.6092							.4294						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T44)

ALPHAT(2) = -4.500 BETAT (1) = -8.230

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7450	.8530	.9260
PHI			
.000	-.0596	-.0851	-.3134
30.000	-.0587	-.0637	-.2777
60.000	.0009	.0195	-.1150
90.000	.0020	-.0356	
120.000	.0925	.0407	.0133
135.000	.0948	.0293	-.0685
150.000	.0445	-.0261	.0556
165.000	.0512	-.0072	-.3098
180.000	.0167	-.0481	-.3488

ALPHAT(2) = -4.350 BETAT (2) = -4.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1000	.7159	.2782	-.2504	-.5671	-.6210	-.1084	-.0162	-.0184	-.1743	-.2358	-.1507	-.0607	-.0316	-.0290
30.000			.3321	-.1879	-.5261	-.5552	-.1397	-.0304	-.0507	-.3227	-.2972	-.1654	-.0762	-.0655	-.0447
60.000			.4154	-.1066	-.4539	-.2994	-.0879	.0444	.0005	-.6008	-.3789	-.3237	-.0676	-.0094	.0037
90.000		.9258	.4987	-.0257	-.3725	-.1953	.0503	.2563	.3844		-.5749	-.7247	-.1333	-.0288	.0054
120.000			.5556	.0319	-.3171	-.2031	.0127	.1943	.2765	-.2474	-.0662	-.0530	-.1186	-.1053	.0011
135.000								.1430		.0816		-.0757		-.1400	
150.000			.5687	.0415	-.3147	-.2361	-.0493	.1169	.1901	.2643	.0073	-.0388	-.2542	-.2165	-.0608
165.000				.0207	-.3408	-.2636	-.0709	.0862	.1763	.3048	.1092	-.1174	-.2346	-.2095	-.0336
180.000	1.1000	.9392	.5182	-.0142	-.3607	-.2754	-.0680	.0950	.1771	.2963	.1116	-.2151	-.2500	-.1979	-.0579
270.000		.7238							.4097						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0330	-.0584	-.3033
30.000	-.0274	-.0379	-.2718
60.000	.0039	.0089	-.1330
90.000	.0171	.0086	
120.000	.0590	-.0113	-.0407
135.000	.0596	-.0298	-.1182
150.000	.0078	-.0877	-.0053
165.000	.0398	-.0503	-.3307
180.000	.0219	-.0709	-.3657

ARC11-716 IA14 01+T12+S12N25 EXTERNAL TANK (RB1T44)

ALPHAT(2) = -4.240 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1190	.7296	.2835	-.2455	-.5720	-.6242	-.0968	-.0058	-.0074	-.1628	-.2112	-.1506	-.0448	-.0164	-.0100
30.000			.2997	-.2347	-.5550	-.5645	-.0925	.0090	-.0003	-.2377	-.2511	-.1892	-.0492	-.0297	-.0344
60.000			.3349	-.1947	-.5142	-.2635	-.0521	.0778	.0416	-.4816	-.5470	-.3664	-.0330	-.0165	-.0031
90.000		.8311	.3845	-.1371	-.4710	-.1783	.0531	.2599	.3962		-.5586	-.7010	-.1436	-.0203	.0080
120.000			.4462	-.0725	-.4234	-.2023	.0018	.1887	.2905	-.1928	-.1278	-.1357	-.1912	-.1206	-.0081
135.000								.1379		.0866		-.1470		-.1666	
150.000			.4991	-.0288	-.3878	-.2332	-.0549	.1131	.2023	.2461	-.1433	-.2224	-.3580	-.2483	-.0859
165.000				-.0072	-.3654	-.2457	-.0658	.0893	.1872	.2958	.0321	-.1840	-.2671	-.1986	-.0355
180.000	1.1190	.9590	.5222	-.0084	-.3511	-.2483	-.0536	.0931	.1874	.2856	.1115	-.2285	-.3152	-.2030	-.0235
270.000		.8319							.3909						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0161	-.0474	-.3032
30.000	-.0228	-.0371	-.2842
60.000	-.0030	-.0086	-.1714
90.000	.0157	-.0064	
120.000	.0339	-.0576	-.1422
135.000	.0259	-.0755	-.2249
150.000	-.0396	-.1552	-.1608
165.000	.0216	-.0874	-.2928
180.000	.0236	-.0809	-.3461

ALPHAT(2) = -4.290 BETAT (4) = 4.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0980	.7143	.2794	-.2543	-.5646	-.6239	-.1118	-.0175	-.0212	-.1769	-.2446	-.1504	-.0809	-.0315	-.0274
30.000			.2489	-.2908	-.5924	-.5587	-.0727	.0320	.0320	-.1830	-.2892	-.1947	-.0548	-.0258	-.0278
60.000			.2462	-.2863	-.5851	-.2388	-.0111	.1134	.0870	-.3750	-.5383	-.3816	-.0487	-.0193	-.0132
90.000		.7233	.2740	-.2439	-.5555	-.1656	.0699	.2690	.4174		-.5419	-.6290	-.1536	-.0109	-.0043
120.000			.3341	-.1798	-.5108	-.2540	.0056	.1873	.3036	-.1233	-.1780	-.1842	-.2226	-.1356	-.0439
135.000								.1270		.0920		-.2141		-.1850	
150.000			.4160	-.1093	-.4573	-.3990	-.0684	.0965	.2058	.2210	-.2789	-.4217	-.4624	-.2798	-.1101
165.000				-.0424	-.3995	-.3410	-.0837	.0672	.1792	.2752	-.0145	-.1842	-.2519	-.1927	-.0822
180.000	1.0980	.9626	.5149	-.0120	-.3599	-.3185	-.0680	.0695	.1722	.2710	.1137	-.1922	-.2674	-.2377	-.0845
270.000		.9348							.3798						

X/LT	.7460	.8530	.9280
PHI			

ARC11-718 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T44)

ALPHAT(2) = -4.290 BETAT (4) = 4.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0371	-.0594	-.3043
30.000	-.0272	-.0497	-.3094
60.000	-.0109	-.0205	-.1678
90.000	-.0035	-.0452	
120.000	-.0065	-.1050	-.2579
135.000	-.0175	-.1179	-.3393
150.000	-.0878	-.2259	-.3105
165.000	-.0164	-.1207	-.3906
180.000	-.0181	-.1148	-.4968

ALPHAT(2) = -4.310 BETAT (5) = 8.220

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0360	.6536	.2412	-.2744	-.5929	-.6332	-.1562	-.0664	-.0677	-.1974	-.2625	-.1615	-.0973	-.0789	-.0782
30.000			.1700	-.3413	-.6332	-.4031	-.0767	.0246	.0320	-.1569	-.3003	-.1768	-.0696	-.0449	-.0525
60.000			.1494	-.3572	-.6254	-.1732	.0002	.1237	.1127	-.3307	-.5629	-.3315	-.0421	-.0344	-.0382
90.000		.6053	.1634	-.3362	-.6131	-.1265	.0728	.2600	.4349		-.5480	-.4428	-.0829	-.0341	-.0660
120.000			.2287	-.2795	-.5899	-.2075	.0019	.1787	.2992	-.0877	-.2329	-.2141	-.2297	-.1736	-.1154
135.000								.1092		.0821		-.2738		-.2539	
150.000			.3208	-.1912	-.5191	-.4991	-.0966	.0655	.1848	.1789	-.3879	-.4839	-.5051	-.2952	-.1719
165.000				-.1015	-.4323	-.4432	-.1231	.0217	.1394	.2162	-.0634	-.2189	-.2637	-.2651	-.1622
180.000	1.0360	.8728	.4871	-.0352	-.3697	-.3792	-.1026	.0256	.1262	.2326	.0972	-.1929	-.3281	-.3009	-.1658
270.000		1.0180							.3641						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0662	-.0896	-.3197
30.000	-.0474	-.0621	-.3066
60.000	-.0407	-.0495	-.1580
90.000	-.0746	-.1257	
120.000	-.0626	-.1359	-.2803
135.000	-.0592	-.1407	-.3597
150.000	-.1454	-.2690	-.3536
165.000	-.0727	-.1502	-.4035
180.000	-.0944	-.1690	-.5328

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T44)

ALPHAT(3) = -.210 BETAT (1) = -8.240

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0670	.7664	.3588	-.1634	-.5162	-.5519	-.1653	-.0598	-.0480	-.1718	-.2409	-.1291	-.0908	-.0860	-.0749
30.000			.4736	-.0445	-.4020	-.4137	-.1961	-.0417	-.0529	-.3386	-.2292	-.1320	-.0877	-.0805	-.0512
60.000			.5761	.0527	-.2843	-.2390	-.0628	.0947	.0824	-.6320	-.4476	-.1124	.0355	-.0030	-.0121
90.000		1.0380	.6258	.1017	-.2236	-.1433	.0742	.2725	.4108		-.6279	-.1743	-.1159	-.0827	-.0430
120.000			.5883	.0694	-.2565	-.1946	-.0185	.1347	.1570	-.4552	-.1940	.0753	.0087	-.0377	.0270
135.000								.0684		.0001		.0182		-.0617	
150.000			.5136	-.0096	-.3374	-.3022	-.1103	.0387	.0783	.2218	.1329	-.0491	-.1602	-.1497	-.0291
165.000				-.0806	-.4135	-.4107	-.1347	.0084	.0895	.2515	.1302	-.0325	-.1360	-.1735	-.0199
180.000	1.0670	.8445	.3796	-.1400	-.4679	-.4354	-.1250	.0131	.1179	.2521	.0659	-.1614	-.1952	-.1903	-.0542
270.000		.6246							.4836						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0824	-.0792	-.2940
30.000	-.0365	-.0376	-.2579
60.000	.0025	.0220	-.1202
90.000	-.0257	-.0537	
120.000	.1124	.1078	.0227
135.000	.1186	.0953	-.0594
150.000	.0749	.0309	.0690
165.000	.0861	.0435	-.2932
180.000	.0560	.0040	-.3373

ALPHAT(3) = -.580 BETAT (2) = -4.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1210	.8163	.3830	-.1525	-.5015	-.5590	-.1133	-.0120	-.0029	-.1521	-.2139	-.1054	-.0553	-.0401	-.0300
30.000			.4393	-.0947	-.4572	-.4987	-.1255	.0030	.0011	-.2653	-.2230	-.1220	-.0637	-.0565	-.0344
60.000			.4942	-.0379	-.3986	-.2556	-.0506	.1086	.1085	-.5844	-.4991	-.1690	.0323	.0055	-.0077
90.000		.9546	.5201	-.0082	-.3584	-.1798	.0632	.2712	.4243		-.6901	-.1015	.0147	-.0521	-.0365
120.000			.5077	-.0169	-.3618	-.2173	-.0103	.1539	.1933	-.3912	-.2091	.0270	-.0613	-.0891	-.0023
135.000								.0992		.0014		-.0469		-.1162	
150.000			.4778	-.0540	-.4037	-.2845	-.0785	.0771	.1252	.2094	.0092	-.0389	-.1866	-.1980	-.0472
165.000				-.0870	-.4389	-.3706	-.0897	.0516	.1311	.2611	.0965	-.0826	-.1795	-.1732	-.0181
180.000	1.1210	.8727	.4144	-.1188	-.4656	-.3501	-.0739	.0601	.1445	.2535	.0875	-.1822	-.2036	-.1663	-.0469
270.000		.7432							.4579						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T44)

ALPHAT(3) = -.580 BETAT (2) = -4.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0257	-.0377	-.2408
30.000	-.0126	-.0111	-.2311
60.000	.0123	.0317	-.1157
90.000	.0214	.0472	
120.000	.0760	.0551	-.0512
135.000	.0800	.0388	-.1144
150.000	.0421	-.0261	.0083
165.000	.0706	.0089	-.3227
180.000	.0536	-.0139	-.3561

ALPHAT(3) = -.590 BETAT (3) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1380	.8356	.3887	-.1431	-.4945	-.5484	-.1003	-.0015	.0113	-.1486	-.1836	-.0979	-.0439	-.0247	-.0175
30.000			.3940	-.1414	-.4866	- 5456	-.0887	.0267	.0388	-.2165	-.1878	-.1187	-.0582	-.0460	-.0192
60.000			.3934	-.1383	-.4787	-.3006	-.0281	.1252	.1392	-.5436	-.5082	-.1938	.0050	-.0081	-.0082
90.000		.8525	.4049	-.1247	-.4720	-.1617	.0641	.2755	.4393		-.7270	.0331	.0105	-.1034	-.0877
120.000			.4132	-.1174	-.4551	-.1918	-.0015	.1665	.2230	-.3266	-.2096	-.0328	-.0929	-.1316	-.0191
135.000								.1161		.0084		-.0887		-.1502	
150.000			.4217	-.1119	-.4431	-.2999	-.0613	.0922	.1576	.1899	-.1587	-.1613	-.2474	-.2276	-.0809
165.000				-.1084	-.4482	-.3866	-.0748	.0691	.1490	.2573	.0185	-.1231	-.1944	-.1917	-.0346
180.000	1.1380	.8672	.4268	-.1145	-.4465	-.3722	-.0628	.0693	.1513	.2493	.0980	-.1667	-.2097	-.1869	-.0155
270.000		.8496							.4368						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0071	-.0213	-.2520
30.000	-.0081	-.0102	-.2241
60.000	.0079	.0184	-.0970
90.000	-.0060	.0214	
120.000	.0407	.0095	-.1538
135.000	.0458	-.0140	-.2262
150.000	-.0097	-.0895	-.1605
165.000	.0411	-.0274	-.3383
180.000	.0468	-.0263	-.3729

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T44)

ALPHAT(3) = -.590 BETAT (4) = 4.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1200	.8119	.3761	-.1525	-.5016	-.5645	-.1163	-.0124	-.0041	-.1590	-.2219	-.1047	-.0573	-.0437	-.0340
30.000			.3241	-.2046	-.5320	-.5955	-.0755	.0381	.0360	-.1772	-.2468	-.1092	-.0649	-.0586	-.0418
60.000			.2955	-.2364	-.5600	-.2799	-.0010	.1417	.1648	-.4881	-.5081	-.1991	-.0351	-.0349	-.0273
90.000		.7456	.2896	-.2368	-.5647	-.1524	.0806	.2847	.4605		-.6910	.1159	-.0429	-.1485	-.1186
120.000			.3097	-.2127	-.5402	-.1979	.0169	.1769	.2489	-.2624	-.1971	-.0745	-.1369	-.1477	-.0450
135.000								.1242		.0232		-.1236		-.1744	
150.000			.3520	-.1777	-.5161	-.3809	-.0518	.0953	.1776	.1729	-.2800	-.3184	-.3774	-.2908	-.1014
165.000				-.1387	-.4891	-.5016	-.0780	.0592	.1502	.2459	-.0362	-.1551	-.1936	-.1810	-.0645
180.000	1.1200	.8756	.4137	-.1177	-.4618	-.4680	-.0803	.0517	.1356	.2390	.0983	-.1572	-.1936	-.2128	-.0672
270.000		.9528							.4212						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0237	-.0314	-.2360
30.000	-.0204	-.0246	-.2520
60.000	-.0111	-.0008	-.1007
90.000	-.0509	-.0397	
120.000	.0075	-.0494	-.2144
135.000	.0088	-.0631	-.3029
150.000	-.0462	-.1567	-.2713
165.000	.0150	-.0624	-.3740
180.000	.0156	-.0805	-.4819

ALPHAT(3) = -.570 BETAT (5) = 8.240

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0580	.7520	.3434	-.1798	-.5318	-.5627	-.1732	-.0656	-.0554	-.1795	-.2500	-.1412	-.0988	-.0916	-.0784
30.000			.2412	-.2772	-.5919	-.6404	-.0933	.0222	.0524	-.1521	-.2618	-.1182	-.0727	-.0732	-.0606
60.000			.1942	-.3287	-.6213	-.2016	.0017	.1417	.1741	-.4450	-.4678	-.1998	-.0717	-.0709	-.0488
90.000		.5237	.1770	-.3372	-.6119	-.1139	.0798	.2820	.4810		-.6259	.0954	-.1014	-.2105	-.1997
120.000			.1997	-.3152	-.6003	-.1631	.0226	.1758	.2516	-.2228	-.2151	-.1117	-.1775	-.1920	-.1114
135.000								.1190		.0275		-.1785		-.2140	
150.000			.2574	-.2601	-.5664	-.3332	-.0625	.0805	.1729	.1523	-.4088	-.3930	-.4320	-.2962	-.1469
165.000				-.1956	-.5176	-.4819	-.1036	.0209	.1170	.1960	-.0743	-.2008	-.2251	-.2430	-.1328
180.000	1.0580	.7750	.3851	-.1453	-.4674	-.4814	-.1093	.0024	.0847	.1962	.0715	-.1722	-.2738	-.2735	-.1358
270.000		1.0400							.4059						

X/LT	.7460	.8530	.9280

ARC11-716 IA14 O1+T12+S12M25 EXTERNAL TANK (RB1T44)

ALPHAT(3) = -.570 BETAT (5) = 8.240

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	-.0716	-.0804	-.2965
30.000	-.0392	-.0458	-.2645
60.000	-.0306	-.0319	-.1195
90.000	-.1459	-.1196	
120.000	-.0333	-.0719	-.2136
135.000	-.0325	-.0844	-.3077
150.000	-.1090	-.1970	-.3102
165.000	-.0411	-.0980	-.3729
180.000	-.0578	-.1233	-.5096

ALPHAT(4) = 4.100 BETAT (1) = -8.280

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.0530	.8681	.4714	-.0546	-.4183	-.4681	-.1908	-.0489	-.0208	-.1118	-.1869	-.1008	-.0739	-.0882	-.0646
30.000			.5898	.0662	-.2993	-.3275	-.1421	.0118	.0222	-.2116	-.1528	-.0751	-.0346	-.0341	-.0266
60.000			.6485	.1259	-.2300	-.1927	-.0148	.1597	.1892	-.4944	-.3157	-.0910	.0463	.0298	.0223
90.000		1.0190	.6147	.0968	-.2409	-.1666	.0661	.2584	.3870		-.5315	-.1650	-.0061	-.0409	-.0237
120.000			.5053	-.0078	-.3409	-.2769	-.0807	.0465	.0328	-.1601	-.4507	-.0375	.0862	.0183	.0372
135.000								-.0113		.0243		-.0843		-.0138	
150.000			.3972	-.1244	-.4541	-.4211	-.1545	-.0270	-.0021	.2032	.0288	-.1169	-.0904	-.1261	-.0213
165.000				-.1960	-.5361	-.5264	-.1444	-.0299	.0545	.2175	.0872	-.0612	-.0795	-.1618	-.0048
180.000	1.0530	.7360	.2625	-.2461	-.5671	-.3917	-.1220	.0089	.1037	.2148	.0408	-.1748	-.1631	-.1639	-.0427
270.000		.6094							.4638						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0545	-.0704	-.2564
30.000	-.3037	-.0072	-.2292
60.000	.0423	.0665	-.0937
90.000	.0475	.0825	
120.000	.1378	.1552	-.0110
135.000	.1497	.1452	-.0722
150.000	.0945	.0372	.0608
165.000	.1148	.0681	-.2865
180.000	.0760	.0284	-.3305

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T44)

ALPHAT(4) = 4.120 BETAT (2) = -4.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1080	.9264	.5080	-.0272	-.4125	-.4641	-.1269	[illegible]027	.0303	-.0905	-.1263	-.0694	-.0332	-.0248	-.0199
30.000			.5562	.0197	-.3538	-.3928	-.1045	60	.0661	-.1677	-.1351	-.0767	-.0212	-.0189	-.0031
60.000			.5534	.0216	-.3452	-.2299	-.0201	.1[illegible]	.2070	-.4461	-.3043	-.1092	.0102	.0080	.0093
90.000		.9309	.4994	-.0200	-.3752	-.1877	.0525	.2[illegible]8	.3970		-.6031	-.2019	-.0402	-.0843	-.0412
120.000			.4240	-.1016	-.4406	-.2495	-.0524	.0815	.0792	-.2091	-.4530	-.1265	.0116	-.0538	.0047
135.000								.0405		.0250		-.1561		-.0751	
150.000			.3582	-.1629	-.4957	-.3478	-.1012	.0297	.0594	.1946	.0121	-.1429	-.1233	-.1569	-.0275
165.000				-.2047	-.5268	-.3904	-.0909	.0313	.0959	.2278	.0693	-.1152	-.1327	-.1306	.0011
180.000	1.1080	.7517	.2899	-.2381	-.5393	-.3113	-.0672	.0650	.1188	.2278	.0819	-.2061	-.1620	-.1298	-.0176
270.000		.7266							.4372						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0033	-.0128	-.2021
30.000	.0190	.0205	-.1812
60.000	.0349	.0613	-.0634
90.000	.0402	.0762	
120.000	.1029	.1131	-.0600
135.000	.1141	.0940	-.1289
150.000	.0762	.0205	-.0128
165.000	.1019	.0486	-.3157
180.000	.0840	.0256	-.3443

ALPHAT(4) = 4.000 BETAT (3) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1200	.9417	.5106	-.0257	-.3948	-.4618	-.1060	.0132	.0438	-.0858	-.1156	-.0569	-.0284	-.0147	-.0051
30.000			.4947	-.0427	-.4082	-.4670	-.0873	.0418	.0850	-.1373	-.1261	-.0668	-.0280	-.0241	-.0087
60.000			.4497	-.0835	-.4364	-.3722	-.0201	.1611	.2245	-.4047	-.2705	-.0816	-.0138	-.0253	-.0103
90.000		.8309	.3866	-.1354	-.4744	-.1907	.0575	.2614	.4130		-.6875	-.1887	-.0865	-.1102	-.0600
120.000			.3414	-.1842	-.5054	-.2264	-.0209	.1137	.1230	-.2726	-.4305	-.1308	-.0591	-.0881	-.0045
135.000								.0783		.0083		-.1621		-.0989	
150.000			.3133	-.2165	-.5432	-.3259	-.0657	.0635	.1067	.1675	-.1724	-.2083	-.2005	-.1855	-.0576
165.000				-.2187	-.5496	-.3505	-.0701	.0501	.1211	.2284	.0075	-.1689	-.1533	-.1490	-.0131
180.000	1.1200	.7473	.2974	-.2267	-.5551	-.3545	-.0640	.0485	.1240	.2269	.0893	-.2161	-.1640	-.1308	-.0030
270.000		.8349							.4162						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 OI+T12+S12N25 EXTERNAL TANK (RB1T44)

ALPHAT(4) = 4.000 BETAT (3) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	.0070	.0043	-.1949
30.000	.0106	.0132	-.1951
60.000	.0187	.0384	-.0842
90.000	.0250	.0520	
120.000	.0772	.0643	-.1162
135.000	.0784	.0492	-.1960
150.000	.0327	-.0289	-.1328
165.000	.0772	.0246	-.3876
180.000	.0867	.0259	-.3813

ALPHAT(4) = 4.040 BETAT (4) = 4.140

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5030	.5580	.6380
PHI															
.000	1.1040	.9189	.4949	-.0308	-.4076	-.4669	-.1299	-.0021	.0261	-.1012	-.1396	-.0663	-.0353	-.0222	-.0181
30.000			.4107	-.1128	-.4757	-.5362	-.0884	.0372	.0846	-.1155	-.1600	-.0677	-.0346	-.0323	-.0286
60.000			.3353	-.1913	-.5341	-.4699	-.0078	.1597	.2365	-.3539	-.2459	-.0692	-.0330	-.0399	-.0286
90.000		.7247	.2778	-.2448	-.5661	-.1788	.0719	.2696	.4394		-.7498	-.1506	-.0814	-.1041	-.0574
120.000			.2512	-.2738	-.5850	-.1796	.0093	.1442	.1692	-.2877	-.4154	-.1607	-.1065	-.1057	-.0192
135.000								.1067		.0061		-.1975		-.1389	
150.000			.2600	-.2774	-.5816	-.3034	-.0397	.0870	.1424	.1503	-.2644	-.3235	-.3058	-.2531	-.0915
165.000				-.2484	-.5727	-.4760	-.0659	.0558	.1295	.2202	-.0463	-.1719	-.1609	-.1434	-.0384
180.000	1.1040	.7515	.2900	-.2400	-.5569	-.5317	-.0815	.0405	.1115	.2126	.0891	-.1944	-.1512	-.1556	-.0479
270.000		.9416							.4008						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0077	-.0131	-.1971
30.000	-.0096	-.0057	-.2098
60.000	-.0032	.0133	-.1169
90.000	.0079	.0207	
120.000	.0435	.0017	-.1914
135.000	.0371	-.0201	-.2858
150.000	-.0091	-.1155	-.2438
165.000	.0389	-.0235	-.3460
180.000	.0392	-.0288	-.4631

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T44)

ALPHAT(4) = 4.070 BETAT (5) = 0.300

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0440	.8638	.4697	-.0532	-.4222	-.4700	-.2036	-.0544	-.0287	-.1304	-.1867	-.1023	-.0758	-.0713	-.0863
30.000			.3225	-.1939	-.5436	-.5961	-.1190	.0043	.0648	-.1027	-.2066	-.0761	-.0629	-.0583	-.0550
60.000			.2234	-.2990	-.6152	-.3499	-.0164	.1462	.2282	-.3110	-.1850	-.0505	-.0715	-.0755	-.0535
90.000		.6027	.1634	-.3366	-.6447	-.1298	.0471	.2654	.4637		-.7445	-.0801	-.0838	-.0916	-.0543
120.000			.1551	-.3472	-.6320	-.1405	.0232	.1474	.1958	-.3179	-.3722	-.2163	-.1728	-.1560	-.0783
135.000								.1112		-.0084		-.2019		-.2050	
150.000			.1759	-.3301	-.6277	-.2264	-.0314	.0887	.1494	.1197	-.3678	-.4022	-.3993	-.2854	-.1363
165.000				-.2979	-.5997	-.4301	-.0777	.0338	.1097	.1750	-.0755	-.2035	-.2197	-.2365	-.1216
180.000	1.0440	.6635	.2617	-.2592	-.5748	-.5703	-.0961	-.0053	.0660	.1591	.0478	-.1715	-.2416	-.2753	-.1308
270.000		1.0280							.3898						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0581	-.0683	-.2571
30.000	-.0396	-.0415	-.2394
60.000	-.0354	-.0231	-.1622
90.000	-.0381	.0035	
120.000	.0001	-.0333	-.2217
135.000	-.0100	-.0470	-.3090
150.000	-.0838	-.1727	-.2917
165.000	-.0236	-.0763	-.3418
180.000	-.0461	-.1082	-.4789

ALPHAT(5) = 0.120 BETAT (1) = -8.270

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9945	.9478	.5757	.0552	-.3119	-.3669	-.2066	-.0387	.0102	-.0527	-.0921	-.0617	-.0429	-.0489	-.0427
30.000			.6924	.1768	-.1970	-.2220	-.0871	.0604	.0868	-.0786	-.0452	-.0211	.0094	.0131	.0142
60.000			.7015	.1829	-.1655	-.1449	.0174	.2003	.2651	-.3769	-.1713	-.0225	.0622	.0636	.0471
90.000		.9672	.5806	.0719	-.2480	-.1811	.0317	.2112	.2929		-.4340	-.2294	.0247	-.0030	.0186
120.000			.4022	-.0972	-.4170	-.3489	-.1791	-.0731	-.1211	-.1551	-.4090	-.1598	.0980	.0604	.0531
135.000								-.1062		-.0015		-.1532		.0481	
150.000			.2755	-.2357	-.5449	-.4974	-.2059	-.0968	-.0750	.1707	-.0914	-.1809	-.0350	-.0850	-.0091
165.000				-.3174	-.6256	-.5884	-.1522	-.0488	.0339	.1852	.0462	-.0865	-.0458	-.1141	.0224
180.000	.9945	.6128	.1533	-.3559	-.6354	-.2787	-.1164	.0140	.0933	.1883	.0252	-.1840	-.1376	-.1260	-.0226
270.000		.5487							.3717						

X/LT	.7480	.8530	.9280
PHI			

ARC11-716 IA14 OR+T12+S12NE5 EXTERNAL TANK (RB1T44)

ALPHAT(5) = 8.120 BETAT (1) = -8.270

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	-.0350	-.0484	-.2234
30.000	.0298	.0356	-.1834
60.000	.0718	.1003	-.0389
90.000	.0937	.1409	
120.000	.1339	.1690	-.0284
135.000	.1375	.1718	-.0890
150.000	.0971	.0615	.0514
165.000	.1153	.0725	-.2964
180.000	.0798	.0343	-.3454

ALPHAT(5) = 8.110 BETAT (2) = -4.130

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0490	1.0150	.6215	.3874	-.2978	-.3525	-.1333	.0206	.0671	-.0148	-.0529	-.0267	-.0092	-.0021	.0067
30.000			.6543	.1282	-.2590	-.2924	-.0865	.0763	.1198	-.0644	-.0651	-.0081	.0088	.0121	.0230
60.000			.5935	.0727	-.2881	-.2416	-.0169	.1853	.2761	-.3250	-.1671	.0036	.0242	.0240	.0293
90.000		.8725	.4981	-.0463	-.3913	-.2441	.0183	.2089	.3015		-.4533	-.2893	-.0266	-.0263	-.0183
120.000			.3276	-.1796	-.5142	-.3383	-.1220	-.0189	-.0636	-.1767	-.4683	-.1713	.0263	.0086	.0193
135.000								-.0378		.0196		-.2671		-.0063	
150.000			.2434	-.2788	-.5859	-.4447	-.1314	-.0281	.0013	.1608	-.0680	-.2123	-.1088	-.0913	-.0265
165.000				-.3181	-.6213	-.3198	-.0933	.0064	.0804	.2051	.0405	-.1470	-.0856	-.0714	.0066
180.000	1.0490	.6231	.1675	-.3430	-.6328	-.2276	-.0694	.0331	.0981	.1998	.0769	-.2173	-.1295	-.0846	-.0127
270.000		.6698							.3388						

X/LT	.7480	.8530	.9280
PHI			
.000	.0181	.0128	-.1701
30.000	.0426	.0529	-.1390
60.000	.0590	.0852	-.0425
90.000	.0758	.1274	
120.000	.1106	.1448	-.0924
135.000	.1295	.1264	-.1413
150.000	.0894	.0311	-.0330
165.000	.1155	.0582	-.3394
180.000	.0945	.0437	-.3410

ARC11-716 IA14 OI+712+S12N25 EXTERNAL TANK (RB1744)

ALPHAT(3) = 8.150 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2930	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0720	1.0350	.6296	.3994	-.3020	-.3530	-.1094	.0401	.0638	-.0137	-.0290	-.0078	.0061	.0098	.0187
30.000			.5841	.3562	-.3356	-.3930	-.0953	.0560	.1242	-.0567	-.0489	-.0111	-.0057	-.0083	.0108
60.000			.4794	-.0460	-.4243	-.4379	-.0337	.1714	.2844	-.2721	-.1019	.0100	-.0010	-.0084	-.0058
90.000		.7732	.3549	-.1613	-.5158	-.2531	.0261	.2202	.3192		-.9057	-.1148	-.0533	-.0710	-.0132
120.000			.2535	-.2909	-.5809	-.3061	-.0637	.0363	.0013	-.2003	-.0455	-.2152	-.0396	-.0480	.0018
135.000								.0255		.0109		-.2389		-.0735	
150.000			.2058	-.3142	-.6143	-.3743	-.0762	.0318	.0616	.1599	-.1724	-.2475	-.1801	-.1528	-.0349
165.000				-.3266	-.6208	-.3494	-.0754	.0393	.1074	.2082	.0059	-.1797	-.1338	-.1049	.0046
180.000	1.0720	.6261	.1868	-.3350	-.6149	-.3223	-.0762	.0435	.1127	.2171	.0942	-.2531	-.1478	-.0959	.0126
270.000		.7866							.1251						

X/LT	.7480	.8530	.9280
PHI			
.000	.0314	.0263	-.1521
30.000	.0280	.0365	-.1675
60.000	.0242	.0508	-.1054
90.000	.0437	.0360	
120.000	.0959	.1021	-.1049
135.000	.0980	.0851	-.1776
150.000	.0538	.0140	-.0918
165.000	.0966	.0574	-.2890
180.000	.1013	.0585	-.3113

ALPHAT(3) = 8.150 BETAT (4) = 4.180

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2930	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0480	1.0080	.6073	.3791	-.2951	-.3490	-.1380	.0174	.0611	-.0291	-.0657	-.0312	-.0093	-.0048	.0075
30.000			.4931	-.0293	-.4069	-.4575	-.1334	.0267	.1021	-.0533	-.0974	-.0378	-.0203	-.0203	-.0138
60.000			.3531	-.1644	-.5192	-.3642	-.0453	.1536	.2783	-.2353	-.1171	-.0078	-.0138	-.0189	-.0140
90.000		.9611	.2326	-.8743	-.5964	-.2285	.0354	.2304	.3333		-.4638	-.0318	-.0611	-.0807	-.0133
120.000			.1685	-.3422	-.6276	-.1932	-.0217	.0785	.0599	-.1965	-.0894	-.2151	-.0984	-.0800	-.0149
135.000								.0670		.0220		-.2272		-.1052	
150.000			.1526	-.3591	-.6365	-.2069	-.0493	.0579	.1057	.1416	-.2709	-.3079	-.2609	-.2063	-.1001
165.000				-.3431	-.6308	-.2166	-.0641	.0415	.1135	.2012	-.0506	-.1707	-.1363	-.1083	-.0320
180.000	1.0480	.6266	.1654	-.3334	-.6285	-.2907	-.0826	.0244	.0970	.1959	.0877	-.1834	-.1198	-.1029	-.0480
270.000		.9862							.3068						

X/LT	.7480	.8530	.9280
PHI			

ARC.1-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T44)

ALPHAT(5) = 8.150 BETAT (4) = 4.180

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0103	.0104	-.1710
30.000	.0039	.0064	-.1922
60.000	-.0008	.0176	-.1421
90.000	.0239	.0208	
120.000	.0530	.0250	-.1848
135.000	.0465	.0030	-.2880
150.000	.0018	-.0868	-.2383
165.000	.0474	-.0151	-.3493
180.000	.0413	-.0304	-.4703

ALPHAT(5) = 8.210 BETAT (5) = 8.360

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	.9885	.9534	.5827	.0630	-.3046	-.3600	-.2233	-.0352	.0116	-.0616	-.1064	-.0768	-.0486	-.0488	-.0430
30.000			.3883	-.1161	-.4710	-.5401	-.1889	-.0276	.0622	-.0545	-.1532	-.0981	-.0716	-.0758	-.0661
60.000			.2231	-.2757	-.6038	-.6495	-.0616	.1306	.2732	-.1942	-.1561	-.0344	-.0219	-.0263	-.0201
90.000		.5421	.1232	-.3784	-.6563	-.1750	.0209	.2274	.3602		-.4698	-.1408	-.0380	-.0695	-.0380
120.000			.0847	-.4016	-.6645	-.1505	.0078	.1128	.1161	-.1768	-.4920	-.2180	-.1329	-.1246	-.0674
135.000								.0871		.0138		-.2642		-.1477	
150.000			.0920	-.3960	-.6709	-.1765	-.0304	.0668	.1257	.1246	-.3360	-.3790	-.3041	-.2282	-.1149
165.000				-.3843	-.6541	-.2425	-.0629	.0346	.1022	.1686	-.0943	-.1925	-.1827	-.1895	-.1134
180.000	.9885	.3525	.1477	-.3615	-.6494	-.5429	-.0912	-.0057	.0546	.1432	.0262	-.1644	-.1896	-.2263	-.1135
270.000		.9760							.3033						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0361	-.0419	-.2182
30.000	-.0441	-.0453	-.2235
60.000	-.0052	.0195	-.1109
90.000	-.0027	.0172	
120.000	.0042	-.0035	-.2087
135.000	.0042	-.0210	-.3014
150.000	-.0628	-.1393	-.2930
165.000	-.0059	-.0529	-.3615
180.000	-.0259	-.0871	-.5154

DATE 06 JAN 75 TABULATED PRESSURE DATA - IA14A - VOL. 9

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T45) (21 FEB 74)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES
LREF = 38.7090 INCHES YMRP = .0000 INCHES
BREF = 38.7090 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = .950 ELEVON = .000
RUDDER = .000 SPOBRK = .000

ALPHAT(1) = -8.580 BETAT (1) = -8.200

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0070	.5828	.1855	-.3173	-.4593	-.3246	-.0863	-.1117	-.0201	-.1501	-.3475	-.2656	-.0950	-.0604	-.0343
30.000			.2757	-.2186	-.4090	-.4591	-.1731	-.1153	-.1557	-.3805	-.4829	-.2746	-.1515	-.0903	-.0429
60.000			.4333	-.0665	-.2929	-.2920	-.2078	-.0863	-.1628	-.5116	-.7321	-.4105	-.1590	.0569	.0290
90.000		.9934	.6131	.1122	-.1504	-.1022	.0712	.2509	.3197		-.6357	-.6795	-.1964	-.0316	.0493
120.000			.7305	.2264	-.0639	-.0559	.1114	.2775	.3868	-.0591	.1229	.0641	-.0478	-.1450	.0485
135.000								.2310		.2214		.0508		-.1818	
150.000			.7486	.2446	-.0580	-.0668	.0225	.1968	.2828	.3888	.2752	.0220	-.1965	-.2788	-.0497
165.000				.2334	-.0949	-.1336	-.0351	.1367	.2487	.3874	.2353	.0053	-.1962	-.2945	-.0424
180.000	1.0070	1.0580	.6418	.1796	-.1451	-.1820	-.0631	.1012	.2313	.3602	.1672	-.1100	-.2498	-.2963	-.1076
270.000		.5895							.3401						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0222	-.0432	-.2324
30.000	-.0462	-.0324	-.1852
60.000	-.0118	-.0279	-.0812
90.000	.0056	-.1133	
120.000	.1115	-.0315	.0781
135.000	.1173	-.0330	-.0129
150.000	.0589	-.0679	.0799
165.000	.0561	-.0305	-.2691
180.000	.0145	-.0549	-.2819

ALPHAT(1) = -8.420 BETAT (2) = -4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0600	.6331	.2126	-.2878	-.5937	-.5576	-.1570	-.0899	.0269	-.1047	-.3400	-.3510	-.0560	-.0247	-.0031
30.000			.2619	-.2461	-.5608	-.6307	-.1808	-.0564	-.0629	-.2852	-.4697	-.2823	-.1424	-.0618	-.0205
60.000			.3643	-.1422	-.4863	-.5448	-.1527	-.0193	-.1080	-.4703	-.7349	-.4259	-.2347	.0063	.0477
90.000		.9070	.5032	-.0002	-.3756	-.4266	.0578	.2519	.3221		-.6410	-.7085	-.2203	-.0805	.0401
120.000			.6300	.1261	-.2680	-.3257	.0598	.2596	.3906	-.0275	.0607	-.0131	-.1329	-.2226	.0293
135.000								.2173		.2117		-.0259		-.2620	
150.000			.6966	.1788	-.2218	-.2786	.0192	.1955	.2955	.3663	.0661	.0037	-.2823	-.3703	-.0539

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T45)

ALPHAT(1) = -8.420 BETAT (2) = -4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
165.000				.1761	-.2232	-.2811	.0000	.1606	.2756	.3947	.1771	-.0650	-.2859	-.3612	-.0264
180.000	1.0600	1.0760	.6669	.1455	-.2475	-.3016	-.0072	.1348	.2688	.3823	.1805	-.1466	-.2790	-.3772	-.0784
270.000		.6981							.3284						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0022	-.0186	-.2388
30.000	-.0002	-.0110	-.1798
60.000	.0238	.0069	-.0576
90.000	.0562	-.0099	
120.000	.0956	-.0791	-.0209
135.000	.0949	-.0973	-.0984
150.000	.0325	-.1357	-.0347
165.000	.0614	-.0803	-.3022
180.000	.0417	-.0892	-.3151

ALPHAT(1) = -8.410 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0790	.6517	.2189	-.2705	-.5866	-.5303	-.1630	-.0858	.0485	-.0972	-.3387	-.3714	-.0357	-.0090	.0196
30.000			.2350	-.2679	-.5781	-.6377	-.1646	-.0430	.0245	-.2105	-.4493	-.3066	-.1101	-.0617	-.0083
60.000			.2916	-.2234	-.5379	-.5998	-.1176	.0345	-.0410	-.4224	-.7379	-.4133	-.2361	-.0597	.0474
90.000		.8107	.3961	-.1134	-.4680	-.5312	.0323	.2634	.3300		-.7066	-.7127	-.2336	-.0867	.0320
120.000			.5166	.0121	-.3707	-.4335	.0367	.2453	.3953	.0318	-.0044	-.1079	-.2118	-.2882	.0045
135.000								.1982		.2079		-.1112		-.3480	
150.000			.6166	.1010	-.2943	-.3532	.0037	.1776	.2925	.3407	-.0551	-.2117	-.3948	-.4746	-.0676
165.000				.1463	-.2564	-.3188	.0033	.1602	.2753	.3883	.1074	-.1176	-.2336	-.4003	-.0443
180.000	1.0790	1.0770	.6731	.1488	-.2446	-.3035	.0151	.1617	.2741	.3774	.1889	-.1831	-.2884	-.4266	-.0474
270.000		.8052							.3174						

X/LT	.7460	.8530	.9280
PHI			
.000	.0131	-.0234	-.2556
30.000	.0069	-.0116	-.2126
60.000	.0393	.0078	-.0407
90.000	.0498	-.0241	
120.000	.0737	-.0959	-.1728
135.000	.0681	-.1121	-.2518
150.000	.0017	-.1972	-.2409

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T45)

ALPHAT(1) = -8.410 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
165.000	.0539	-.1148	-.3143
180.000	.0572	-.1066	-.3316

ALPHAT(1) = -8.530 BETAT (4) = 4.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0620	.6332	.2154	-.2915	-.5939	-.5482	-.1626	-.0887	.0228	-.1097	-.3369	-.3442	-.0544	-.0261	-.0003
30.000			.1997	-.3053	-.5995	-.5507	-.1507	-.0702	.0625	-.1596	-.4152	-.3293	-.0706	-.0369	-.0177
60.000			.2161	-.2895	-.5920	-.4681	-.1400	.0142	.0293	-.3598	-.7168	-.3908	-.1811	-.0754	.0058
90.000		.7022	.2827	-.2245	-.5443	-.5664	-.0480	.2822	.3427		-.7190	-.7126	-.2424	-.0856	-.0096
120.000			.3994	-.1070	-.4621	-.5274	-.0169	.2226	.3956	.0817	-.0644	-.1704	-.2534	-.2654	-.0820
135.000								.1630		.1974		-.1961		-.3109	
150.000			.5212	.0117	-.3667	-.4261	-.0522	.1381	.2709	.3023	-.2117	-.3900	-.5041	-.4171	-.1318
165.000				.0959	-.2891	-.3534	-.0500	.1249	.2519	.3545	.0680	-.1403	-.2622	-.2811	-.1046
180.000	1.0620	1.0720	.6589	.1392	-.2471	-.3166	-.0216	.1378	.2537	.3529	.1850	-.1779	-.2961	-.3461	-.0990
270.000		.9077							.3134						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0049	-.0238	-.2415
30.000	-.0095	-.0235	-.2486
60.000	.0210	.0027	-.0821
90.000	-.0077	-.0794	
120.000	.0116	-.1254	-.2708
135.000	.0027	-.1331	-.3498
150.000	-.0684	-.1371	-.3456
165.000	-.0018	-.1291	-.3913
180.000	-.0027	-.1271	-.5042

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T45)

ALPHAT(1) = -8.580 BETAT (5) = 8.260

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0040	.5763	.1818	-.3179	-.6075	-.4012	-.1781	-.1159	-.0296	-.1427	-.3431	-.2788	-.0943	-.0581	-.0359
30.000			.1434	-.3408	-.6280	-.2419	-.1585	-.1080	.0108	-.1446	-.3956	-.2431	-.0927	-.0608	-.0381
60.000			.1434	-.3415	-.6246	-.2008	-.1419	-.0770	.0941	-.3204	-.6512	-.3637	-.1625	-.0575	-.0092
90.000		.5913	.1783	-.3151	-.6043	-.2165	-.1161	.2568	.3465		-.7042	-.6444	-.2763	-.0877	-.0500
120.000			.2782	-.2127	-.5427	-.6030	-.0940	.1880	.3916	.1146	-.0894	-.2138	-.2939	-.2812	-.1678
135.000								.1109		.1756		-.2702		-.3452	
150.000			.4188	-.0802	-.4370	-.4924	-.1448	.0738	.2320	.2346	-.2808	-.4662	-.5763	-.3900	-.2219
165.000				.0400	-.3306	-.3901	-.1515	.0577	.2009	.2809	.0197	-.1629	-.2687	-.3126	-.2152
180.000	1.0040	.9807	.6332	.1209	-.2544	-.3201	-.0844	.0866	.1953	.3097	.1724	-.1426	-.3059	-.3862	-.2188
270.000		.9912							.3081						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0234	-.0432	-.2347
30.000	-.0321	-.0402	-.2554
60.000	-.0019	-.0110	-.1902
90.000	-.1076	-.2096	
120.000	-.0741	-.1585	-.2895
135.000	-.0615	-.1518	-.3668
150.000	-.1454	-.2813	-.3774
165.000	-.0866	-.1539	-.4318
180.000	-.1172	-.1844	-.5735

ALPHAT(2) = -4.490 BETAT (1) = -8.240

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0680	.9968	.2907	-.2251	-.5490	-.6165	-.1572	-.0705	-.0039	-.1447	-.3160	-.2199	-.0716	-.0605	-.0598
30.000			.3953	-.1154	-.4751	-.5433	-.2666	-.0408	-.0735	-.3518	-.4019	-.1965	-.1303	-.0892	-.0409
60.000			.5288	.0146	-.3634	-.4172	-.1106	.0469	.0083	-.6543	-.6345	-.3248	-.0985	.0405	.0275
90.000		1.0449	.6419	.1228	-.2650	-.2998	.0917	.2923	.4172		-.6332	-.6717	-.1430	-.0221	.0360
120.000			.6798	.1710	-.2295	-.2786	.0499	.2297	.2999	-.2428	.0335	.0648	-.0388	-.1250	.0241
135.000								.1659		.0818		.0328		-.1622	
150.000			.6521	.1344	-.2596	-.3134	-.0422	.1310	.1953	.2954	.2188	-.0093	-.2040	-.2639	-.0516
165.000				.0727	-.3131	-.3819	-.0725	.0770	.1793	.3278	.1958	-.0139	-.1967	-.2778	-.0467
180.000	1.0680	.9751	.5281	.0119	-.3645	-.4274	-.0718	.0508	.1855	.3189	.1300	-.1324	-.2564	-.2865	-.1012
270.000		.6463							.4777						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T45)

ALPHAT(2) = -4.490 BETAT (1) = -8.240

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	-.0352	-.0421	-.2358
30.000	-.0302	-.0202	-.1993
60.000	.0307	.0608	-.0590
90.000	.0637	.0425	
120.000	.1219	.0871	.0726
135.000	.1279	.0740	-.0001
150.000	.0755	.0229	.0995
165.000	.0771	.0387	-.2579
180.000	.0414	-.0004	-.2838

ALPHAT(2) = -4.380 BETAT (2) = -4.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1250	.7512	.3224	-.2067	-.5319	-.5995	-.1493	-.0444	.0561	-.1059	-.3128	-.3126	-.0277	-.0170	-.0097
30.000			.3738	-.1454	-.4952	-.5616	-.1943	.0210	.0149	-.2592	-.3807	-.2388	-.0858	-.0680	-.0269
60.000			.4548	-.0702	-.4316	-.4974	-.0687	.0962	.0612	-.6016	-.6237	-.3513	-.1601	-.0093	.0357
90.000		.9603	.5344	.0119	-.3679	-.4365	.0909	.3011	.4291		-.6298	-.7130	-.1761	-.0490	.0248
120.000			.5913	.0692	-.3258	-.3975	.0643	.2397	.3205	-.1921	-.0410	-.0175	-.1197	-.2003	.0062
135.000								.1876		.0945		-.0442		-.2423	
150.000			.6025	.0746	-.3167	-.3870	.0032	.1615	.2279	.2842	.0131	-.0110	-.2668	-.3479	-.0568
165.000				.0539	-.3355	-.4118	-.0233	.1244	.2142	.3325	.1305	-.0824	-.2672	-.3441	-.0383
180.000	1.1250	.9900	.5550	.0222	-.3618	-.4310	-.0260	.1114	.2160	.3260	.1385	-.1705	-.2116	-.3267	-.0752
270.000		.7612							.4555						

X/LT	.7460	.8 .0	.9280
PHI			
.000	-.0076	-.0168	-.2289
30.000	.0036	.0096	-.1812
60.000	.0377	.0549	-.0588
90.000	.0661	.0715	
120.000	.0958	.0351	-.0022
135.000	.0985	.0157	-.0646
150.000	.0487	-.0381	.0331
165.000	.0741	.0009	-.2963
180.000	.0534	-.0227	-.3098

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T45)

ALPHAT(2) = -4.290 BETAT (3) = -.020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1410	.7671	.3271	-.2024	-.5291	-.5805	-.1447	-.0390	.0701	-.0965	-.3165	-.3887	-.0112	-.0031	.0055
30.000			.3434	-.1955	-.5253	-.5900	-.1490	.0054	.0799	-.1093	-.3638	-.3283	-.0354	-.0326	-.0247
60.000			.3741	-.1578	-.4979	-.5606	-.0762	.1240	.1107	-.5488	-.6164	-.3834	-.1238	-.0536	.0173
90.000		.8640	.4276	-.0955	-.4588	-.5179	.0471	.3126	.4414		-.6325	-.7395	-.2115	-.0634	.0151
120.000			.4858	-.0320	-.4060	-.4769	.0284	.2407	.3401	-.1371	-.1032	-.1104	-.1855	-.2573	.0011
135.000								.1899		.1175		-.1275		-.3164	
150.000			.5375	.0076	-.3732	-.4444	-.0122	.1645	.2462	.2756	-.1228	-.2318	-.3572	-.4309	-.0697
165.000				.0284	-.3569	-.4318	-.0191	.1398	.2255	.3268	.0517	-.1455	-.2374	-.3619	-.0527
180.000	1.1410	.9906	.5599	.0282	-.3580	-.4	-.0118	.1463	.2084	.3187	.1411	-.2126	-.2791	-.3413	-.0423
270.000		.8649							.4344						

X/LT	.7460	.8530	.9280
PHI			
.000	.0158	-.0015	-.2295
30.000	.0022	.0022	-.2113
60.000	.0374	.0386	-.0721
90.000	.0548	.0363	
120.000	.0744	-.0129	-.1251
135.000	.0713	-.0301	-.2039
150.000	.0143	-.1031	-.1660
165.000	.0627	-.0428	-.3033
180.000	.0638	-.0377	-.3256

ALPHAT(2) = -4.350 BETAT (4) = 4.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1210	.7477	.3196	-.2060	-.5343	-.6011	-.1501	-.0529	.0522	-.1092	-.3141	-.3000	-.0286	-.0206	-.0131
30.000			.2919	-.2289	-.5560	-.6177	-.1284	-.0489	.0832	-.1396	-.3608	-.3303	-.0305	-.0247	-.0120
60.000			.2862	-.2320	-.5538	-.5701	-.0916	.0406	.1629	-.4773	-.6077	-.3717	-.0791	-.0307	-.0034
90.000		.7564	.3172	-.2044	-.5327	-.4397	-.0285	.2529	.4674		-.6103	-.6929	-.1923	-.0675	-.0115
120.000			.3761	-.1375	-.4850	-.5562	-.0222	.1973	.3551	-.0751	-.1662	-.1735	-.2194	-.2373	-.0624
135.000								.1627		.1300		-.2152		-.2920	
150.000			.4580	-.0659	-.4372	-.5025	-.0643	.1446	.2522	.2611	-.2667	-.4079	-.4589	-.4258	-.1182
165.000				-.0077	-.3903	-.4613	-.0847	.1202	.2190	.3109	.0191	-.1809	-.2572	-.2778	-.1078
180.000	1.1210	.9909	.5502	.0227	-.3602	-.4332	-.0608	.1173	.2049	.3071	.1483	-.2121	-.2850	-.3309	-.1031
270.000		.9636							.4230						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T45)

ALPHAT(2) = -4.350 BETAT (4) = 4.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0063	-.0156	-.2283
30.000	.0019	-.0073	-.2314
60.000	.0151	.0168	-.1065
90.000	.0140	-.0156	
120.000	.0242	-.0639	-.2329
135.000	.0185	-.0739	-.3118
150.000	-.0371	-.1765	-.2947
165.000	.0145	-.0712	-.3663
180.000	.0132	-.0659	-.4842

ALPHAT(2) = -4.370 BETAT (5) = 8.260

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0620	.6912	.2878	-.2273	-.5482	-.6166	-.1581	-.0724	-.0092	-.1551	-.3240	-.2147	-.0673	-.0576	-.0544
30.000			.2175	-.2845	-.5941	-.3276	-.1263	-.0742	.0165	-.1628	-.3990	-.2257	-.0636	-.0442	-.0307
60.000			.1980	-.3037	-.5967	-.1715	-.1037	-.0285	.1349	-.4243	-.6161	-.2771	-.0634	-.0312	-.0273
90.000		.6452	.2116	-.2863	-.5898	-.1278	-.0827	.0648	.5005		-.6379	-.5028	-.1341	-.0602	-.0600
120.000			.2726	-.2313	-.5512	-.4188	-.0785	.1153	.3603	-.0287	-.1815	-.2438	-.2513	-.2425	-.1353
135.000								.1005		.1318		-.2921		-.3079	
150.000			.3622	-.1490	-.4968	-.5598	-.1021	.0844	.2290	.2252	-.3295	-.4738	-.5462	-.3554	-.1972
165.000				-.0617	-.4279	-.4954	-.1427	.0585	.1729	.2583	-.0155	-.2088	-.2732	-.3113	-.1899
180.000	1.0620	.9042	.5231	.0016	-.3720	-.4411	-.1168	.0587	.1454	.2657	.1435	-.1709	-.3274	-.3696	-.1976
270.000		1.0480							.4119						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0341	-.0398	-.2350
30.000	-.0112	-.0161	-.2294
60.000	-.0092	-.0047	-.0928
90.000	-.0618	-.0979	
120.000	-.0365	-.0954	-.2634
135.000	-.0367	-.0999	-.3397
150.000	-.1003	-.2209	-.3444
165.000	-.0617	-.1077	-.3942
180.000	-.0848	-.1338	-.5545

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T45)

ALPHAT(3) = -.610 BETAT (1) = -8.280

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0850	.7906	.3873	-.1326	-.4835	-.5539	-.2613	-.0256	-.0083	-.1442	-.3020	-.1950	-.0722	-.0780	-.0787
30.000			.5045	-.0129	-.3934	-.4640	-.2520	.0007	-.0096	-.2860	-.2981	-.1629	-.0989	-.0870	-.0508
60.000			.6107	.0887	-.3041	-.3648	-.0434	.1269	.1293	-.5410	-.4811	-.1772	-.0713	.0147	.0272
90.000		1.0690	.6617	.1414	-.2608	-.3218	.1037	.3077	.4521		-.5929	-.6336	-.1340	-.0395	.0241
120.000			.6310	.1153	-.2865	-.3504	.0060	.1708	.2063	-.3927	-.2149	.1082	.0187	-.0754	.0178
135.000								.1068		-.0489		.0394		-.1095	
150.000			.5594	.0399	-.3475	-.4127	-.1007	.0744	.1092	.2153	.1625	-.0263	-.1644	-.1979	-.0286
165.000				-.0336	-.4140	-.4769	-.1383	.0386	.1177	.2748	.1591	-.0153	-.1404	-.2227	-.0262
180.000	1.0850	.8820	.4232	-.0917	-.4515	-.5137	-.1116	.0200	.1486	.2846	.0943	-.1354	-.1649	-.2231	-.0710
270.000		.6554							.5635						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0461	-.0389	-.2304
30.000	-.0147	.0011	-.1991
60.000	.0500	.0937	-.0567
90.000	.0748	.0709	
120.000	.1475	.1546	.0899
135.000	.1544	.1450	.0157
150.000	.1099	.0841	.1211
165.000	.1159	.0917	-.2332
180.000	.0832	.0510	-.2672

ALPHAT(3) = -.580 BETAT (2) = -4.130

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1450	.8902	.4235	-.1071	-.4757	-.5346	-.2788	.0105	.0679	-.0866	-.3112	-.1788	-.0176	-.0286	-.0232
30.000			.4777	-.0513	-.4268	-.4984	-.2706	.0608	.0679	-.1975	-.3105	-.1892	-.0500	-.0568	-.0325
60.000			.5310	.0021	-.3793	-.4476	-.0357	.1620	.1687	-.4892	-.4993	-.2165	-.0405	-.0138	.0130
90.000		.9866	.5563	.0290	-.3589	-.4299	.0884	.3200	.4675		-.6542	-.6162	-.1486	-.0564	.0188
120.000			.5434	.0225	-.3673	-.4395	.0086	.2008	.2393	-.3322	-.2358	-.0001	-.0451	-.1582	-.0033
135.000								.1493		-.0061		-.0609		-.1987	
150.000			.5142	-.0128	-.3922	-.4610	-.0798	.1262	.1632	.2142	-.0094	-.0455	-.1625	-.2924	-.0507
165.000				-.0447	-.4196	-.4879	-.0864	.0941	.1645	.2794	.0978	-.0812	-.1575	-.2693	-.0347
180.000	1.1450	.9024	.4519	-.0803	-.4449	-.5104	-.0804	.0834	.1813	.2754	.0978	-.1736	-.1722	-.2041	-.0598
270.000		.7758							.5157						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 OR+T12+S12N25 EXTERNAL TANK (RB1T45)

ALPHAT(3) = -.580 BETAT (2) = -4.130

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0001	-.0019	-.1911
30.000	.0103	.0298	-.1802
60.000	.0460	.0777	-.0655
90.000	.0764	.0944	
120.000	.1178	.1088	.0404
135.000	.1216	.0918	-.0330
150.000	.0815	.0329	.0668
165.000	.1036	.0620	-.2801
180.000	.0824	.0357	-.2917

ALPHAT(3) = -.580 BETAT (3) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1590	.8672	.4300	-.1006	-.4612	-.5342	-.2565	.0298	.0903	-.0698	-.3143	-.1942	.0007	-.0097	-.0022
30.000			.4348	-.0972	-.4597	-.5372	-.1589	.0539	.1140	-.1352	-.3427	-.1961	-.0300	-.0346	-.0128
60.000			.4372	-.0908	-.4544	-.5233	-.0516	.1593	.2063	-.4347	-.5173	-.2526	.0035	-.0080	.0025
90.000		.8867	.4432	-.0813	-.4493	-.5202	.0409	.3271	.4841		-.7240	-.2436	-.0515	-.0615	-.0305
120.000			.4506	-.0746	-.4440	-.5150	-.0052	.2037	.2735	-.2607	-.2528	-.0459	-.1046	-.1909	-.0175
135.000								.1546		.0382		-.0943		-.2331	
150.000			.4600	-.0700	-.4402	-.5046	-.0522	.1352	.2030	.2138	-.1798	-.1915	-.2491	-.3276	-.0787
165.000				-.0641	-.4366	-.5095	-.0589	.0995	.1912	.2700	.0111	-.1345	-.1800	-.2522	-.0440
180.000	1.1590	.9006	.4622	-.0720	-.4418	-.5053	-.0425	.0635	.1759	.2684	.1031	-.2085	-.1982	-.2531	-.0365
270.000		.8820							.4835						

X/LT	.7460	.8530	.9280
PHI			
.000	.0173	.0183	-.1927
30.000	.0200	.0317	-.1652
60.000	.0354	.0599	-.0709
90.000	.0492	.0749	
120.000	.0870	.0538	-.0846
135.000	.0892	.0375	-.1609
150.000	.0399	-.0335	-.1203
165.000	.0836	.0152	-.2915
180.000	.0845	.0177	-.3148

ARC11-716 IA14 O1+T12+S12NE5 EXTERNAL TANK (RB1T45)

ALPHAT(3) = -.980 BETAT (4) = 4.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1410	.8439	.4180	-.1122	-.4733	-.5386	-.2771	.0104	.0639	-.0918	-.3147	-.1757	-.0194	-.0270	-.0222
30.000			.3677	-.1645	-.5063	-.5822	-.1167	-.0125	.1115	-.1054	-.3810	-.1322	-.0189	-.0402	-.0277
60.000			.3361	-.1992	-.5217	-.5947	-.0806	.0579	.2466	-.3834	-.5160	-.2033	-.0345	-.0253	-.0170
90.000		.7785	.3298	-.1996	-.5238	-.5084	-.0355	.2177	.5151		-.7197	-.0002	.0190	-.1106	-.1066
120.000			.3496	-.1787	-.5154	-.5707	-.0429	.1109	.3008	-.1844	-.2959	-.0916	-.1183	-.2033	-.0418
135.000								.0831		.0702		-.1365		-.2498	
150.000			.3901	-.1395	-.4907	-.5564	-.0718	.0922	.2234	.1992	-.2975	-.3376	-.3583	-.3860	-.0935
165.000				-.1024	-.4698	-.5342	-.1050	.0958	.1941	.2720	-.0240	-.1705	-.1602	-.2363	-.0778
180.000	1.1410	.9037	.4317	-.0820	-.4444	-.5118	-.1268	.1002	.1807	.2558	.1127	-.2182	-.1817	-.2650	-.0838
270.000		.9812							.4696						

X/LT	.7480	.8530	.9280
PHI			
.000	.0012	.0024	-.1839
30.000	.0078	.0176	-.1893
60.000	.0156	.0389	-.0516
90.000	-.0170	.0045	
120.000	.0424	-.0062	-.1877
135.000	.0495	-.0173	-.2704
150.000	.0042	-.1138	-.2456
165.000	.0452	-.0179	-.3393
180.000	.0474	-.0155	-.4513

ALPHAT(3) = -.990 BETAT (5) = 8.260

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0850	.7895	.3863	-.1361	-.4868	-.5602	-.2783	-.0339	-.0109	-.1533	-.3085	-.2302	-.0721	-.0789	-.0752
30.000			.2855	-.2315	-.5558	-.6230	-.1263	-.0546	.0730	-.1103	-.3920	-.1243	-.0402	-.0495	-.0402
60.000			.2388	-.2745	-.5762	-.2994	-.1077	-.0190	.2316	-.3292	-.4870	-.1457	-.0646	-.0506	-.0420
90.000		.6640	.2225	-.2661	-.5983	-.1447	-.0797	.0763	.5543		-.6364	.0148	-.0308	-.1550	-.1831
120.000			.2424	-.2619	-.5722	-.1177	-.0642	.0198	.2164	-.1370	-.3223	-.1300	-.1789	-.2247	-.1037
135.000								.0118		.0773		-.2125		-.2533	
150.000			.3001	-.2177	-.5420	-.4412	-.0909	.0150	.2013	.1837	-.3835	-.4020	-.4249	-.3441	-.1567
165.000				-.1532	-.4970	-.5683	-.0920	.0310	.1447	.2219	-.0411	-.2266	-.2241	-.2730	-.1494
180.000	1.0850	.8154	.4215	-.0993	-.4575	-.5316	-.0969	.0332	.1071	.2143	.1094	-.1855	-.2713	-.3172	-.1547
270.000		1.0700							.4488						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 OI+T12+S12N25 EXTERNAL TANK (RB1T45)

ALPHAT(3) = -.990 BETAT (3) = 8.260

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	-.0508	-.0380	-.2337
30.000	-.0137	-.0100	-.2074
60.000	-.0135	.0043	-.0714
90.000	-.1169	-.0791	
120.000	-.0058	-.0353	-.2047
135.000	-.0053	-.0433	-.3016
150.000	-.0960	-.1641	-.3118
165.000	-.0193	-.0805	-.3604
180.000	-.0335	-.0876	-.5239

ALPHAT(4) = 4.070 BETAT (1) = -8.300

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0780	.9010	.9084	-.0130	-.3995	-.4676	-.5516	.0078	.0137	-.1025	-.1708	-.1586	-.0516	-.0588	-.0579
30.000			.6220	.0979	-.3014	-.3755	-.1769	.0460	.0643	-.1943	-.1241	-.1509	-.0213	-.0298	-.0189
60.000			.6798	.1549	-.2468	-.3131	.0056	.1919	.2351	-.4094	-.2980	-.1623	.0599	.0441	.0274
90.000		1.0480	.6487	.1277	-.2764	-.3380	.0869	.2889	.4224		-.4675	-.2227	-.0204	-.0606	-.0128
120.000			.5401	.0238	-.3633	-.4264	-.0801	.0765	.0661	-.2941	-.5027	-.1193	.1319	.0219	.0286
135.000								.0236		.0125		-.1233		-.0167	
150.000			.4354	-.0839	-.4499	-.5162	-.1761	.0094	.0119	.2051	.0219	-.1406	.0452	-.1396	-.0268
165.000				-.1803	-.5125	-.5799	-.1460	.0023	.0621	.2382	.0924	-.0810	.0590	-.1717	-.0103
180.000	1.0780	.7691	.3036	-.2140	-.5371	-.5980	-.1427	.0068	.1150	.2377	.0570	-.1766	-.1341	-.1643	-.0461
270.000		.6470							.5455						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0330	-.0360	-.1927
30.000	.0137	.0344	-.1703
60.000	.0606	.1039	-.0414
90.000	.0583	.0695	
120.000	.1734	.2058	.0782
135.000	.1811	.1933	.0101
150.000	.1297	.1126	.1167
165.000	.1426	.1216	-.2306
180.000	.1059	.0738	-.2756

ARC11-716 IA14 C6-T12+S12NE5 EXTERNAL TANK (RB1745)

ALPHAT(4) = 4.150 BETAT (2) = -4.130

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1300	.9570	.5425	.0090	-.3774	-.4580	-.5421	.0648	.0848	-.0464	-.2251	-.1312	-.0172	-.0188	-.0060
30.000			.5883	.0543	-.3420	-.4266	-.3438	.1034	.1200	-.1189	-.1975	-.1599	-.0156	-.0097	.0007
60.000			.5852	.0528	-.3381	-.4129	-.0226	.2100	.2623	-.3574	-.3252	-.2129	.0093	.0216	.0148
90.000		.9991	.5345	.0112	-.3740	-.4486	.0805	.3054	.4369		-.5264	-.2834	.0085	-.0504	-.0397
120.000			.4990	-.0671	-.4306	-.5059	-.0540	.1284	.1195	-.2596	-.4762	-.2006	.0387	-.0482	-.0055
135.000								.0842		.0154		-.2309		-.0786	
150.000			.3949	-.1265	-.4849	-.5516	-.1132	.0660	.0879	.2056	.0105	-.1823	-.0928	-.1705	-.0426
165.000				-.1732	-.5201	-.5749	-.1017	.0356	.1233	.2391	.0702	-.1394	-.1114	-.1429	-.0166
180.000	1.1300	.7822	.3276	-.2047	-.5271	-.5636	-.0955	.0236	.1353	.2174	.0840	-.2021	-.1428	-.1471	-.0334
270.000		.7636							.4842						

X/LT	.7480	.8530	.9280
PHI			
.000	.0147	.0246	-.1392
30.000	.0309	.0539	-.1213
60.000	.0552	.0960	-.0191
90.000	.0611	.1195	
120.000	.1387	.1590	-.0078
135.000	.1405	.1398	-.0746
150.000	.1081	.0891	.0239
165.000	.1262	.0815	-.2791
180.000	.1054	.0633	-.2955

ALPHAT(4) = 4.070 BETAT (3) = -.020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1510	.9750	.5504	.0157	-.3714	-.4524	-.5410	.0810	.1109	-.0258	-.2349	-.1752	.0002	-.0009	-.0038
30.000			.5380	.0000	-.3846	-.4662	-.3938	.1013	.1508	-.0688	-.2448	-.1744	-.0090	-.0130	-.0045
60.000			.4917	-.0420	-.4189	-.4893	-.0727	.1887	.2879	-.3066	-.3421	-.1891	-.0213	-.0037	.0015
90.000		.8715	.4310	-.0938	-.4611	-.5281	-.0187	.3087	.4612		-.6041	-.2901	-.0367	-.0928	-.0828
120.000			.3830	-.1440	-.4960	-.5683	-.0843	.1220	.1814	-.2529	-.4372	-.1893	-.0271	-.0971	-.0210
139.000								.0654		.0336		-.2539		-.1233	
150.000			.3562	-.1762	-.5157	-.5825	-.1132	.0261	.1677	.2074	-.1488	-.2499	-.1733	-.2082	-.0638
165.000				-.1841	-.5160	-.5843	-.1181	.0063	.1778	.2505	.0292	-.2239	-.1315	-.1683	-.0297
180.000	1.1510	.7865	.3436	-.1933	-.5253	-.5787	-.1244	.0009	.1816	.2494	.1066	-.2782	-.1462	-.1506	-.0155
270.000		.8717							.4623						

X/LT	.7480	.8530	.9280
PHI			

ARC11-716 IA14 OL+T12+S12N25 EXTERNAL TANK (R81T45)

ALPHAT(4) = 4.070 BETAT (3) = -.C10

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	.0318	.0467	-.1303
30.000	.0340	.0570	-.1306
60.000	.0414	.0728	-.0195
90.000	.0469	.1076	
120.000	.1101	.1087	-.0783
135.000	.1142	.0946	-.1534
150.000	.0741	.0295	-.1021
165.000	.1020	.0685	-.2816
180.000	.1134	.0890	-.2978

ALPHAT(4) = 4.070 BETAT (4) = 4.150

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1310	.9530	.5333	.0080	-.3815	-.4584	-.5462	.0590	.0849	-.0537	-.2249	-.1118	-.0181	-.0151	-.0133
30.000			.4544	-.0897	-.4414	-.5175	-.2669	.0407	.1473	-.0565	-.3021	-.0883	-.0151	-.0256	-.0285
60.000			.3785	-.1484	-.5080	-.5598	-.0684	.0685	.2914	-.2615	-.3655	-.1041	-.0390	-.0458	-.0329
90.000		.7634	.3230	-.1998	-.5379	-.5345	-.0645	.1759	.4951		-.7245	-.2048	-.0351	-.0931	-.0581
120.000			.2941	-.2234	-.5576	-.5454	-.0857	.0437	.2308	-.3076	-.4251	-.1411	-.0907	-.1422	-.0323
135.000								.0059		.0151		-.1896		-.1642	
150.000			.3044	-.2233	-.5634	-.5853	-.0963	.0037	.1722	.1618	-.2647	-.3072	-.2665	-.2834	-.0798
165.000				-.2.9?	-.5479	-.6122	-.1160	-.0123	.1644	.2143	-.0366	-.2089	-.1353	-.1491	-.0423
180.000	1.1310	.7904	.3344	-.19.?	-.5375	-.5982	-.1244	.0190	.1489	.2174	.0953	-.2721	-.1289	-.1579	-.0632
270.000		.9706							.4424						

X/LT	.7480	.8530	.9280
PHI			
.000	.0166	.0266	-.1341
30.000	.0190	.0334	-.1489
60.000	.0190	.0472	-.0643
90.000	.0366	.0610	
120.000	.0666	.0358	-.1587
135.000	.0618	.0213	-.2515
150.000	.0329	-.0681	-.2244
165.000	.0594	.0166	-.3216
180.000	.0645	.0151	-.4348

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T45)

ALPHAT(5) = 8.220 BETAT (1) = -8.310

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.178	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0280	.9836	.6134	.0952	-.3014	-.3747	-.4457	-.0199	.0395	-.0476	-.1215	-.0766	-.0274	-.0301	-.0289
30.000			.7270	.2066	-.2044	-.2784	-.1004	.0824	.1265	-.1054	-.0760	-.0347	.0273	.0277	.0268
60.000			.7301	.2163	-.1915	-.2554	.0288	.2305	.3098	-.2964	-.1648	-.0595	.0840	.0805	.0631
90.000		.9980	.6170	.1077	-.2859	-.3402	.0530	.2425	.3334		-.4243	-.2564	.0104	.0586	.0161
120.000			.4450	-.0552	-.4295	-.4868	-.1834	-.0410	-.0898	-.1635	-.3942	-.2012	.0791	.0805	.0489
135.000								-.0710		-.0022		-.2161		.0578	
150.000			.3232	-.1884	-.5338	-.5963	-.2211	-.0659	-.0743	.1786	-.1044	-.2016	-.0130	-.0722	-.0115
165.000				-.2612	-.5921	-.6550	-.1635	-.0557	.0354	.1941	.0509	-.1001	-.0282	-.0924	.0182
180.000	1.0280	.6570	.2015	-.3035	-.6007	-.2690	-.1559	-.0628	.0846	.1815	.0445	-.1895	-.1061	-.1120	-.0219
270.000		.5955							.4372						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0131	-.0064	-.1476
30.000	.0532	.0765	-.0893
60.000	.0952	.1408	.0422
90.000	.1137	.1897	
120.000	.1578	.2045	.0007
135.000	.1798	.2058	-.0228
150.000	.1261	.1057	.0950
165.000	.1424	.1129	-.2707
180.000	.1050	.0698	-.3006

ALPHAT(5) = 8.270 BETAT (2) = -4.150

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0790	1.0460	.6549	.1247	-.2883	-.3648	-.4533	.0709	.1081	-.0002	-.1273	-.0286	.0082	.0106	.0116
30.000			.6877	.1586	-.2608	-.3429	-.2800	.1211	.1645	-.0479	-.1017	-.0374	.0232	.0250	.0296
60.000			.6292	.1044	-.3034	-.3770	.0049	.2280	.3250	-.2491	-.1877	-.0962	.0485	.0486	.0371
90.000		.9059	.5059	-.0064	-.3962	-.4700	.0342	.2540	.3432		-.4234	-.3511	-.0592	-.0239	-.0261
120.000			.3673	-.1381	-.4998	-.5696	-.1236	.0248	-.0307	-.1588	-.4217	-.3035	.0203	.0162	.0116
135.000								-.0042		.0151		-.3009		.0014	
150.000			.2839	-.2335	-.5547	-.6229	-.1491	-.0225	.0140	.1915	-.0494	-.2574	-.0985	-.0960	-.0302
165.000				-.2712	-.6000	-.5362	-.1389	-.0544	.0977	.2141	.0546	-.1497	-.0790	-.0673	-.0015
180.000	1.0790	.6620	.2157	-.2931	-.5977	-.2387	-.1413	-.0542	.1075	.1877	.0838	-.1990	-.1143	-.0867	-.0227
270.000		.7058							.3793						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25 EXTERNAL TANK (RB1T45)

ALPHAT(5) = 8.270 BETAT (2) = -4.150

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0339	.0502	-.0944
30.000	.0593	.0901	-.0654
60.000	.0742	.1262	.0588
90.000	.0931	.1739	
120.000	.1369	.1711	-.0455
135.000	.1482	.1561	-.0997
150.000	.1115	.0740	.0021
165.000	.1329	.0965	-.3054
180.000	.1113	.0688	-.3133

ALPHAT(5) = 8.310 BETAT (3) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0090	.0490	.1100	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0950	1.0640	.6597	.1325	-.2789	-.3602	-.4514	.1038	.1321	.0198	-.1445	.0014	.0164	.0133	.0213
30.000			.6205	.0965	-.3133	-.3965	-.4541	.1231	.1754	-.0129	-.1586	-.0001	.0068	.0026	.0090
60.000			.5182	-.0017	-.3925	-.4625	-.1042	.2134	.3352	-.1949	-.2088	.0053	.0033	-.0089	-.0081
90.000		.8120	.3957	-.1170	-.4821	-.5543	-.0613	.2669	.3526		-.5089	-.1742	-.0494	-.0618	-.0152
120.000			.2958	-.2150	-.5483	-.6155	-.1462	.0378	.0389	-.1920	-.5244	-.2574	-.0325	-.0496	-.0030
135.000								-.0181		.0209		-.3089		-.0784	
150.000			.2503	-.2612	-.5934	-.6368	-.1580	-.0225	.1019	.1978	-.1281	-.2579	-.1523	-.1569	-.0534
165.000				-.2562	-.5882	-.4801	-.1564	-.0621	.1439	.2299	.0293	-.1991	-.1128	-.1089	.0019
180.000	1.0950	.6642	.2274	-.2761	-.5941	-.3652	-.1488	-.0685	.1403	.2212	.1012	-.2423	-.1284	-.1005	.0035
270.000		.8149							.3572						

X/LT	.7460	.8530	.9280
PHI			
.000	.0504	.0632	-.0869
30.000	.0494	.0730	-.1088
60.000	.0456	.0900	-.0556
90.000	.0787	.0787	
120.000	.1242	.1381	-.0434
135.000	.1202	.1200	-.1312
150.000	.0923	.0599	-.0657
165.000	.1214	.0949	-.2781
180.000	.1211	.0929	-.2988

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T45)

ALPHAT(5) = 8.270 BETAT (4) = 4.210

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0770	1.0390	.6402	.1200	-.2889	-.3651	-.4576	.0664	.1062	-.0084	-.1276	-.0351	.0076	.0076	.0076
30.000			.5302	.0126	-.3789	-.4565	-.5318	.0735	.1513	-.0115	-.2138	-.0318	-.0051	-.0157	-.0138
60.000			.3969	-.1210	-.4830	-.5518	-.1234	.1340	.3360	-.1573	-.2542	.0129	.0067	-.0124	-.0184
90.000		.7063	.2848	-.2242	-.5591	-.6123	-.1190	.1752	.3778		-.4765	-.0494	-.0441	-.0631	-.0156
120.000			.2236	-.2818	-.6015	-.3834	-.1310	-.0287	.1198	-.1974	-.5032	-.2212	-.0833	-.0911	-.0147
135.000								-.0443		.0236		-.2212		-.1305	
150.000			.2076	-.2993	-.6117	-.2754	-.1367	-.0650	.1271	.1742	-.2162	-.2567	-.2231	-.2172	-.0804
165.000				-.2977	-.6009	-.2246	-.1354	-.0665	.1160	.1996	-.0212	-.1922	-.1181	-.1121	-.0269
180.000	1.0770	.6671	.2184	-.2943	-.5986	-.3521	-.1439	-.0634	.1253	.2004	.0900	-.2246	-.1450	-.0986	-.0430
270.000		.9177							.3482						

X/LT	.7460	.8530	.9280
PHI			
.000	.0368	.0510	-.0909
30.000	.0246	.0474	-.1144
60.000	.0179	.0512	-.0882
90.000	.0446	.0512	
120.000	.0757	.0568	-.1431
135.000	.0678	.0392	-.2465
150.000	.0347	-.0469	-.2194
165.000	.0638	.0239	-.3185
180.000	.0660	.0145	-.4378

ALPHAT(5) = 8.240 BETAT (5) = 8.420

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0170	.9836	.6171	.1017	-.2980	-.3725	-.4190	-.0273	.0335	-.0544	-.1146	-.0997	-.0303	-.0275	-.0307
30.000			.4311	-.0750	-.4470	-.5191	-.5899	.0024	.0942	-.0147	-.2083	-.0959	-.0425	-.0508	-.0520
60.000			.2720	-.2323	-.5591	-.6293	-.1748	.0198	.3364	-.1077	-.2752	-.0317	.0139	-.0066	-.0136
90.000		.5890	.1718	-.3174	-.6157	-.1642	-.1361	-.0462	.4225		-.4807	-.0129	.0202	-.0554	-.0316
120.000			.1383	-.3387	-.6080	-.1524	-.1233	-.0765	.1194	-.1753	-.4899	-.1509	-.1163	-.1494	-.0597
135.000								-.0640		.0118		-.1893		-.1652	
150.000			.1449	-.3485	-.5656	-.1640	-.1260	-.0604	.0516	.0957	-.2436	-.2803	-.2544	-.2437	-.0943
165.000				-.3283	-.6255	-.1712	-.1238	-.0651	.0791	.1399	-.0619	-.1820	-.1548	-.1703	-.0987
180.000	1.0170	.5993	.1961	-.3110	-.6095	-.2849	-.1272	-.0487	.0485	.1455	.0343	-.1924	-.1555	-.2162	-.1078
270.000		1.0070							.3437						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25 EXTERNAL TANK (RB1T45)

ALPHAT(5) = 8.240 BETAT (5) = 8.420

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0183	-.0028	-.1430
30.000	-.0318	-.0006	-.1497
60.000	.0146	.0560	-.0464
90.000	.0268	.0580	
120.000	.0382	.0340	-.1761
135.000	.0284	.0149	-.2736
150.000	-.0246	-.0976	-.2689
165.000	.0198	-.0208	-.3329
180.000	.0015	-.0492	-.5194

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T46) (14 FEB 74)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES
LREF = 38.7090 INCHES YMRP = .0000 INCHES
BREF = 38.7090 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = .975 ELEVON = .000
RUDDER = .000 SPOBRK = .000

ALPHAT(1) = -8.670 BETAT (1) = -8.210

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0240	.6058	.2139	-.2824	-.5796	-.4897	-.1612	-.1175	-.0283	-.1147	-.3330	-.3388	-.1460	-.0590	-.0182
30.000			.3803	-.1950	-.5196	-.5865	-.1998	-.0976	-.1301	-.3717	-.4764	-.2837	-.2057	-.1229	-.0292
60.000			.4537	-.0409	-.3971	-.4489	-.1834	-.0681	-.1333	-.5453	-.7462	-.4129	-.1862	-.0085	.0324
90.000		1.0100	.6293	.1323	-.2498	-.2963	.0899	.2735	.3471		-.6105	-.6364	-.2094	-.1077	.0420
120.000			.7450	.2434	-.1519	-.1937	.1373	.2975	.4076	-.0524	.1469	.0874	-.0280	-.1424	-.0086
135.000								.2477		.2312		.0769		-.1678	
150.000			.7668	.2613	-.1329	-.1937	.0343	.2142	.3026	.4034	.2888	.0533	-.1683	-.3027	-.0765
165.000				.2145	-.1793	-.2450	-.0264	.1526	.2663	.4092	.2642	.0324	-.1750	-.3233	-.0755
180.000	1.0240	1.0730	.6560	.1531	-.2317	-.2904	-.0597	.1124	.2517	.3847	.1943	-.0755	-.2166	-.3623	-.1382
270.000		.6172							.3592						

X/LT	.7480	.8530	.9280
PHI			
.000	.0045	-.0097	- 1901
30.000	-.0203	-.0007	-.1450
60.000	.0169	.0039	-.0560
90.000	.0579	-.0467	
120.000	.1358	-.0054	.0960
135.000	.1399	-.0086	.0177
150.000	.0760	-.0426	.1057
165.000	.0708	-.0049	-.2320
180.000	.0317	-.0257	-.2459

ALPHAT(1) = -8.630 BETAT (2) = -4.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0760	.6581	.2414	-.2541	-.5591	-.5908	-.1544	-.1084	.0114	-.0675	-.3192	-.4606	-.1089	-.0411	.0143
30.000			.2883	-.2129	-.5253	-.5925	-.1658	-.0863	-.0360	-.2692	-.4580	-.2908	-.1980	-.1173	-.0180
60.000			.3894	-.1168	-.4560	-.5219	-.1641	.0128	-.0789	-.5029	-.7587	-.4088	-.2666	-.0413	.0445
90.000		.9241	.5252	.0226	-.3526	-.4214	.0635	.2803	.3472		-.6549	-.6627	-.2265	-.1396	-.0217
120.000			.6457	.1463	-.2523	-.3262	.0817	.2870	.4162	.0023	.0911	.0132	-.1175	-.2044	-.1158
135.000								.2441		.2351		.0029		-.2418	
150.000			.7152	.1991	-.2048	-.2734	.0422	.2209	.3212	.3875	.0885	.0272	-.2615	-.3762	-.1658

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T46)

ALPHAT(1) = -8.630 BETAT (2) = -4.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
165.000				.1995	-.2019	-.2778	.0162	.1649	.2995	.4199	.2021	-.0309	-.2620	-.3524	-.1491
180.000	1.0760	1.0930	.5883	.1705	-.2286	-.2958	-.0113	.1560	.2913	.4103	.2100	-.1076	-.2562	-.3818	-.1660
270.000		.7256							.3474						

X/LT	.7460	.8530	.9280
PHI			
.000	.0303	.0165	-.1933
30.000	.0281	.0226	-.1369
60.000	.0563	.0405	-.0057
90.000	.0872	.0338	
120.000	.1188	-.0355	-.0191
135.000	.1171	-.0498	-.0796
150.000	.0548	-.0936	-.0187
165.000	.0753	-.0421	-.2674
180.000	.0436	-.0507	-.2780

ALPHAT(1) = -8.550 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0950	.6755	.2488	-.2498	-.5541	-.5533	-.1528	-.0953	.0449	-.0444	-.3089	-.5177	-.0862	-.0211	.0305
30.000			.2628	-.2313	-.5466	-.6035	-.1681	-.0906	.0587	-.1943	-.4364	-.3389	-.1414	-.0930	-.0065
60.000			.3194	-.1877	-.5042	-.5660	-.1668	.0210	-.0049	-.4773	-.7533	-.3847	-.2925	-.1168	.0348
90.000		.8334	.4221	-.0821	-.4381	-.5062	-.0211	.2942	.3534		-.6236	-.6915	-.2408	-.1465	-.0398
120.000			.5417	.0392	-.3433	-.4172	-.0001	.2732	.4237	.0612	.0308	-.0749	-.1763	-.2808	-.1094
135.000								.2284		.2378		-.0752		-.3503	
150.000			.6392	.1255	-.2702	-.3409	-.0466	.2079	.3215	.3670	-.0259	-.1855	-.3515	-.4948	-.1699
165.000				.1687	-.2358	-.3054	-.0406	.1881	.3040	.4154	.1384	-.0788	-.1920	-.3740	-.1539
180.000	1.0930	1.0960	.6925	.1757	-.2270	-.2903	.0008	.1807	.2991	.4042	.2196	-.1435	-.2391	-.3947	-.1562
270.000		.8293							.3435						

X/L"	.7460	.8530	.9280
PHI			
.000	.0496	.0161	-.2106
30.000	.0369	.0260	-.1664
60.000	.0739	.0472	.0232
90.000	.0621	.0016	
120.000	.0844	-.0463	-.1526
135.000	.0724	-.0594	-.2200
150.000	.0375	-.1392	-.2028

ARC11-716 IA14 01+T12+S12N25 EXTERNAL TANK (RB1T46)

ALPHAT(1) = -8.550 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
165.000	.0687	-.0660	-.2837
180.000	.0621	-.0566	-.2920

ALPHAT(1) = -8.600 BETAT (4) = 4.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0760	.6568	.2453	-.2464	-.5538	-.5968	-.1526	-.1083	.0099	-.0647	-.3107	-.4583	-.1236	-.0340	.0183
30.000			.2306	-.2717	-.5626	-.6118	-.1548	-.1066	.0697	-.1213	-.4058	-.4304	-.1155	-.0530	-.0096
60.000			.2464	-.2436	-.5528	-.5936	-.1595	-.0892	.0755	-.3616	-.7314	-.3685	-.2399	-.1345	.0034
90.000		.7259	.3099	-.1849	-.5085	-.5672	-.1079	.2236	.3675		-.6331	-.7039	-.2629	-.1410	-.0617
120.000			.4265	-.0701	-.4277	-.4997	-.0627	.2269	.4327	.1295	-.0238	-.1277	-.2205	-.3177	-.1489
135.000								.1880		.2344		-.1556		-.3867	
150.000			.5480	.0426	-.3365	-.4047	-.1994	.1671	.3034	.3344	-.1642	-.3489	-.4596	-.5363	-.1870
165.000				.1251	-.2652	-.3343	-.1613	.1552	.2817	.3802	.1081	-.0985	-.2113	-.2920	-.1632
180.000	1.0760	1.0910	.5847	.1696	-.2255	-.2952	-.0375	.1675	.2791	.3840	.2222	-.1370	-.2405	-.3500	-.2020
270.000		.9308							.3414						

X/LT	.7460	.8530	.9280
PHI			
.000	.0317	.0213	-.1485
30.000	.0224	.0176	-.1894
60.000	.0584	.0447	-.0194
90.000	-.0154	-.0851	
120.000	.0258	-.0810	-.2379
135.000	.0098	-.0891	-.3139
150.000	-.0400	-.1864	-.3137
165.000	.0015	-.0865	-.3523
180.000	.0079	-.0851	-.4590

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T46)

ALPHAT(1) = -8.630 BETAT (5) = 8.270

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0160	.5962	.1998	-.2863	-.4044	-.3036	-.0529	-.1216	-.0351	-.1169	-.3278	-.3441	-.1432	-.0538	-.0183
30.000			.1688	-.3086	-.4146	-.1466	-.0478	-.1244	-.0206	-.1330	-.3910	-.4389	-.1173	-.0441	-.0180
60.000			.1696	-.3073	-.4137	-.0832	-.1588	-.1395	.1352	-.2950	-.6991	-.3695	-.1809	-.0870	-.0104
90.000		.6091	.2022	-.2806	-.4027	-.1099	-.1603	.1412	.3727		-.6623	-.7026	-.2722	-.1198	-.0796
120.000			.3044	-.1798	-.3487	-.4032	-.1336	.1778	.4237	.1554	-.0557	-.1829	-.2773	-.3220	-.1926
135.000								.1229		.2044		-.2379		-.3720	
150.000			.4442	-.0537	-.2651	-.3158	-.2798	.0921	.2531	.2622	-.2506	-.4289	-.5697	-.4605	-.2473
165.000				.1315	-.1782	-.2348	-.1996	.0702	.2199	.3035	.0572	-.1281	-.2367	-.3273	-.2320
180.000	1.0150	.9989	.6546	.1975	-.1180	-.1749	-.0902	.0966	.2119	.3337	.2028	-.1123	-.2817	-.4143	-.2190
270.000		1.0090							.3320						

X/LT	.7460	.8530	.9280
PHI			
.000	.0040	-.0096	-.1911
30.000	-.0026	-.0057	-.2086
60.000	.0235	.0213	-.0519
90.000	-.1294	-.2282	
120.000	-.0535	-.1292	-.2718
135.000	-.0592	-.1239	-.3434
150.000	-.1102	-.2523	-.3532
165.000	-.0908	-.1221	-.3959
180.000	-.1064	-.1525	-.5340

ALPHAT(2) = -4.390 BETAT (1) = -8.230

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0810	.7134	.3156	-.1940	-.5162	-.5784	-.1309	-.0893	.0179	-.1067	-.3149	-.2900	-.0928	-.0494	-.0458
30.000			.4216	-.0876	-.4421	-.5160	-.3293	-.0150	-.0444	-.3164	-.4075	-.2103	-.1728	-.1060	-.0335
60.000			.5496	.0385	-.3388	-.4069	-.0745	.0712	.0407	-.6036	-.6420	-.3207	-.1346	.0219	.0323
90.000		1.0630	.6634	.1456	-.2500	-.3170	.1152	.3154	.4429		-.6529	-.6347	-.1592	-.0536	.0246
120.000			.6991	.1907	-.2154	-.2892	.0723	.2509	.3231	-.2161	.0536	.0890	-.0187	-.1249	-.0150
135.000								.1874		.0885		.0616		-.1518	
150.000			.6715	.1554	-.2450	-.3144	-.0401	.1531	.2137	.3052	.2288	.0194	-.1783	-.2915	-.0673
165.000				.0959	-.2968	-.3668	-.1862	.1047	.1959	.3455	.2203	.0118	-.1674	-.3184	-.0685
180.000	1.0810	.9887	.5512	.0343	-.3412	-.4129	-.2289	.0744	.2058	.3425	.1543	-.0991	-.2363	-.3506	-.1201
270.000		.6663							.5127						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25 EXTERNAL TANK (RB1T46)

ALPHAT(2) = -4.390 BETAT (1) = -8.230

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	-.0110	-.0124	-.1925
30.000	-.0078	.0091	-.1565
60.000	.0533	.0687	-.0273
90.000	.0933	.0863	
120.000	.1410	.1147	.1000
135.000	.1466	.1026	.0308
150.000	.0955	.0513	.1268
165.000	.0942	.0675	-.2226
180.000	.0586	.0291	-.2464

ALPHAT(2) = -4.360 BETAT (2) = -4.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CF

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1360	.7710	.3484	-.1787	-.5033	-.5746	-.1371	-.0785	.0559	-.0597	-.3084	-.4394	-.0399	-.0178	.0016
30.000			.3997	-.1229	-.4724	-.5428	-.2465	-.0082	.0380	-.2223	-.3822	-.2666	-.1339	-.0794	-.0206
60.000			.4786	-.0438	-.4032	-.4792	-.1252	.1204	.0832	-.5592	-.6506	-.3246	-.2264	-.0279	.0392
90.000		.9799	.5537	.0356	-.3416	-.4230	.0550	.3301	.4494		-.6611	-.6652	-.1957	-.0872	-.0084
120.000			.6084	.0899	-.3034	-.3858	.0131	.2624	.3429	-.1548	-.0069	.0110	-.1038	-.1954	-.0853
135.000								.2128		.1211		-.0140		-.2277	
150.000			.6207	.0969	-.2928	-.3719	-.1684	.1864	.2551	.3062	.0244	.0142	-.2483	-.3590	-.1388
165.000				.0800	-.3045	-.3935	-.2366	.1436	.2387	.3501	.1505	-.0496	-.2539	-.3528	-.1077
180.000	1.1360	1.0090	.5710	.0480	-.3311	-.4135	-.1275	.1087	.2438	.3459	.1604	-.1313	-.2409	-.3677	-.1347
270.000		.7800							.4980						

X/LT	.7480	.8530	.9260
PHI			
.000	.0127	.0177	-.1932
30.000	.0252	.0406	-.1425
60.000	.0805	.0877	-.0147
90.000	.0844	.1085	
120.000	.1163	.0712	.0118
135.000	.1187	.0521	-.0431
150.000	.0704	-.0009	.0492
165.000	.0877	.0287	-.2699
180.000	.0646	.0063	-.2763

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T46)

ALPHAT(2) = -4.270 BETAT (3) = -.010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1530	.7878	.3515	-.1642	-.5035	-.5571	-.1415	-.0702	.0719	-.0437	-.2945	-.4632	-.0384	-.0085	.0126
30.000			.3684	-.1593	-.4920	-.5595	-.1755	-.0579	.1176	-.1489	-.3625	-.4004	-.0683	-.0443	-.0206
60.000			.4006	-.1291	-.4694	-.5303	-.1238	.1052	.1484	-.5084	-.6486	-.3077	-.1708	-.1099	.0103
90.000		.8858	.4542	-.0640	-.4336	-.4987	-.0101	.3113	.4729		-.6927	-.7067	-.2195	-.1048	-.0306
120.000			.5117	-.0048	-.3903	-.4565	-.0150	.2353	.3733	-.1001	-.0782	-.0898	-.1575	-.2554	-.0879
135.000								.1905		.1425		-.1071		-.3106	
150.000			.5625	.0363	-.3502	-.4243	-.1147	.1729	.2738	.2941	-.0999	-.2201	-.3260	-.4421	-.1571
165.000				.0504	-.3390	-.4110	-.1453	.1466	.2513	.3496	.0764	-.1172	-.1987	-.3643	-.1440
180.000	1.1530	1.0080	.5823	.0498	-.3370	-.4065	-.0612	.1120	.2400	.3441	.1669	-.1656	-.2398	-.3372	-.1391
270.000		.8848							.4605						

X/LT	.7480	.8530	.9280
PHI			
.000	.0405	.0328	-.1818
30.000	.0279	.0347	-.1631
60.000	.0640	.0718	-.0090
90.000	.0655	.0639	
120.000	.0903	.0229	-.1067
135.000	.0830	.0078	-.1770
150.000	.0494	-.0633	-.1480
165.000	.0789	-.0029	-.2749
180.000	.0836	.0001	-.2910

ALPHAT(2) = -4.400 BETAT (4) = 4.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1310	.7658	.3442	-.1730	-.5071	-.5689	-.1462	-.0818	.0606	-.0672	-.3025	-.4456	-.0450	-.0154	-.0004
30.000			.3142	-.1874	-.5258	-.5877	-.1365	-.0738	.0856	-.1022	-.3637	-.4300	-.0420	-.0209	-.0035
60.000			.3101	-.1878	-.5222	-.5762	-.1218	.0122	.1760	-.4527	-.6530	-.2647	-.0955	-.0650	-.0165
90.000		.7783	.3412	-.1721	-.5060	-.4150	-.0565	.0950	.5099		-.7014	-.6399	-.2083	-.1082	-.0396
120.000			.4011	-.1112	-.4658	-.5304	-.0423	.1230	.3643	-.0370	-.1248	-.1543	-.1088	-.2749	-.1024
135.000								.1320		.1562		-.1915		-.3226	
150.000			.4813	-.0399	-.4102	-.4811	-.1074	.1324	.2769	.2806	-.2360	-.3873	-.4336	-.4814	-.1491
165.000				.0129	-.3681	-.4397	-.2401	.1295	.2407	.3269	.0480	-.1498	-.2193	-.2802	-.1446
180.000	1.1310	1.0090	.5721	.0447	-.3374	-.4127	-.1633	.1183	.2219	.3294	.1737	-.1839	-.2454	-.3370	-.1589
270.000		.9780							.4446						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O8+T12+S12N25 EXTERNAL TANK (RB1T46)

ALPHAT(2) = -4.400 BETAT (4) = 4.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	.0139	.0163	-.1855
30.000	.0253	.0245	-.1855
60.000	.0343	.0482	-.0446
90.000	.0174	-.0021	
120.000	.0373	-.0324	-.2108
135.000	.0296	-.0429	-.2860
150.000	-.0103	-.1398	-.2789
165.000	.0219	-.0403	-.3391
180.000	.0275	-.0354	-.4503

ALPHAT(2) = -4.410 BETAT (5) = 8.240

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0780	.7134	.3082	-.1952	-.5133	-.5798	-.1451	-.0963	.0114	-.1205	-.3195	-.2908	-.0956	-.0498	-.0405
30.000			.2476	-.2465	-.5603	-.5088	-.1287	-.0916	.0076	-.1304	-.3909	-.2694	-.0705	-.0369	-.0168
60.000			.2261	-.2753	-.5549	-.1892	-.1175	-.0630	.0827	-.4084	-.6514	-.1981	-.0803	-.0578	-.0328
90.000		.6706	.2403	-.2494	-.5444	-.0989	-.0848	-.0788	.5560		-.6944	-.4428	-.1677	-.1006	-.0827
120.000			.2984	-.1997	-.5198	-.3728	-.0925	.0153	.3920	.0159	-.1314	-.2074	-.2542	-.2774	-.1652
135.000								.0369		.1668		-.2531		-.3354	
150.000			.3882	-.1207	-.4673	-.5308	-.1433	.0547	.2492	.2479	-.2733	-.4358	-.5484	-.4173	-.2185
165.000				-.0337	-.4015	-.4718	-.3426	.0767	.1923	.2792	.0196	-.1746	-.2485	-.3345	-.2136
180.000	1.0780	.9196	.5461	.0294	-.3493	-.4217	-.2426	.0806	.1610	.2881	.1724	-.1388	-.2978	-.4051	-.2163
270.000		1.0650							.4361						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0084	-.0072	-.1876
30.000	.0149	.0175	-.1852
60.000	.0114	.0303	-.0415
90.000	-.0679	-.0951	
120.000	-.0293	-.0666	-.2404
135.000	-.0350	-.0705	-.3136
150.000	-.0688	-.1935	-.3211
165.000	-.0513	-.0755	-.3657
180.000	-.0684	-.1028	-.5177

ARC11-716 IA14 01+T12+S12N25 EXTERNAL TANK (RB1T46)

ALPHAT(3) = -.610 BETAT (1) = -8.280

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.1000	.8136	.4152	-.1035	-.4504	-.5242	-.3655	-.0531	.0126	-.1069	-.3077	-.2667	-.0615	-.0804	-.0639
30.000			.5274	.0163	-.3656	-.4446	-.4932	.0199	.0194	-.2489	-.3174	-.1707	-.1275	-.0927	-.0405
60.000			.6335	.1132	-.2799	-.3553	-.0473	.1487	.1561	-.4890	-.4726	-.1974	-.1305	.0139	.0340
90.000		1.0890	.6816	.1634	-.2372	-.3171	.1200	.3324	.4743		-.6078	-.6198	-.1548	-.0601	.0220
120.000			.6492	.1379	-.2634	-.3405	.0040	.1898	.2261	-.3529	-.1942	.1384	.0382	-.0778	-.0225
135.000								.1230		-.0475		.0650		-.1059	
150.000			.5769	.0641	-.3223	-.3983	-.2729	.0941	.1312	.2206	.1865	.0064	-.1455	-.2294	-.0704
165.000				-.0076	-.3828	-.4561	-.4755	.0607	.1332	.2883	.1758	.0147	-.1254	-.2440	-.0591
180.000	1.1000	.9033	.4467	-.0655	-.4189	-.4923	-.2646	.0320	.1642	.3013	.1157	-.1036	-.1687	-.2717	-.0942
270.000		.6813							.6037						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0262	-.0080	-.1911
30.000	.0040	.0328	-.1579
60.000	.0881	.1241	-.0194
90.000	.1066	.1190	
120.000	.1661	.1877	.1225
135.000	.1716	.1766	.0510
150.000	.1271	.1145	.1461
165.000	.1332	.1235	-.1984
180.000	.1013	.0778	-.2301

ALPHAT(3) = -.590 BETAT (2) = -4.130

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1570	.8696	.4485	-.0818	-.4404	-.5112	-.4176	-.0384	.0931	-.0420	-.2871	-.3729	-.2182	-.0090	-.0128
30.000			.5005	-.0243	-.4001	-.4739	-.5449	.0341	.0994	-.1576	-.3093	-.2271	-.0574	-.0472	-.0355
60.000			.5534	.0262	-.3573	-.4302	-.1625	.1782	.2019	-.4393	-.5048	-.2028	-.1328	-.0538	.0111
90.000		1.0010	.5734	.0522	-.3354	-.4127	.0265	.3471	.4902		-.6462	-.6724	-.2077	-.0611	-.0062
120.000			.5627	.0483	-.3455	-.4222	-.0690	.2130	.2668	-.2927	-.2903	.0228	-.0555	-.1438	-.0736
135.000								.1523		.0153		-.0427		-.1828	
150.000			.5341	.0216	-.3737	-.4417	-.2625	.1220	.1898	.3332	-.0092	-.0260	-.1505	-.3007	-.1146
165.000				-.0214	-.3996	-.4659	-.2367	.0782	.1881	.2934	.0096	-.0587	-.1418	-.2929	-.0923
180.000	1.1570	.9201	.4751	-.0627	-.4186	-.4880	-.1357	.0662	.1988	.3902	.0148	-.1415	-.1397	-.2415	-.1027
270.000		.7982							.5506						

X/LT	.7460	.8550	.9280

ARC11-P16 IA14 OR*T12*S12NB5 EXTERNAL TANK (RB1T48)

ALPHA(3) = -.990 BETA (3) = -4.130

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L	.7480	.8530	.9290
PHI			
.000	.0183	.0265	-.1637
30.000	.0276	.0373	-.1356
60.000	.0706	.1110	-.0351
90.000	.1020	.1396	
120.000	.1377	.1393	.0648
135.000	.1390	.1234	-.0042
150.000	.1013	.0646	.0999
165.000	.1197	.0910	-.2495
180.000	.0936	.0625	-.2587

ALPHA(3) = -.990 BETA (3) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.1720	.8649	.4541	-.0745	-.4254	-.4978	-.5036	-.0205	.1205	-.0237	-.2781	-.3893	-.0058	.0085	.0044
30.000			.4583	-.0713	-.4287	-.5025	-.3051	-.0058	.1458	-.0873	-.3180	-.3679	-.0234	-.0202	-.0079
60.000			.4560	-.0694	-.4235	-.4919	-.1123	.1006	.2492	-.3822	-.5139	-.2563	-.0466	-.0185	-.0011
90.000		.9033	.4638	-.0585	-.4187	-.4906	-.0369	.2850	.5147		-.7295	-.3359	-.1268	-.0833	-.0361
120.000			.4716	-.0495	-.4143	-.4878	-.0503	.1455	.3115	-.2195	-.2365	-.0604	-.1069	-.1984	-.0664
135.000								.0934		.0653		-.1195		-.2400	
150.000			.4627	-.0453	-.4100	-.4758	-.1010	.0811	.2284	.2277	-.1611	-.1985	-.2502	-.3605	-.1410
165.000				-.0391	-.4032	-.4821	-.1108	.0725	.2045	.2786	.0271	-.1343	-.1908	-.2630	-.1037
180.000	1.1720	.9192	.4825	-.0457	-.4087	-.4795	-.0820	.0394	.1867	.2732	.1205	-.1873	-.1852	-.2769	-.0914
270.000		.9038							.5119						

X/L	.7480	.8530	.9230
PHI			
.000	.0401	.0464	-.1502
30.000	.0392	.0375	-.1343
60.000	.0316	.0086	-.0429
90.000	.0816	.1058	
120.000	.1048	.0814	-.0554
135.000	.1036	.0674	-.1397
150.000	.0700	-.0026	-.1031
165.000	.0968	.0403	-.2719
180.000	.0974	.0477	-.2874

ARC11-716 IA14 OL+T12+S12N25 EXTERNAL TANK (RB1T46)

ALPHAT(3) = -.990 BETAT (4) = .110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.1510	.8623	.4410	-.0844	-.4373	-.5040	-.4856	-.0295	.0923	-.0490	-.2869	-.3741	-.0186	-.0105	-.0111
30.000			.5898	-.1360	-.4704	-.5375	-.1239	-.0417	.0916	-.0804	-.3449	-.3650	-.0096	-.0179	-.0149
60.000			.3615	-.1640	-.4868	-.5492	-.1112	-.0106	.2976	-.3270	-.4953	-.2407	-.0481	-.0202	-.0149
90.000		.7959	.3553	-.1633	-.4974	-.5519	-.0702	.1154	.5547		-.7081	-.1634	-.0238	-.0841	-.0933
120.000			.3748	-.1461	-.4767	-.5432	-.0485	.0283	.3016	-.1374	-.2469	-.0940	-.1324	-.2179	-.0894
135.000								.0268		.0942		-.1565		-.2648	
150.000			.4129	-.1134	-.4534	-.5223	-.0587	.0178	.2108	.2038	-.2579	-.3433	-.3553	-.4223	-.1174
165.000				-.0741	-.4341	-.5037	-.1031	.0411	.2012	.2695	.0103	-.1679	-.1636	-.2639	-.1181
180.000	1.1510	.8218	.4748	-.0525	-.4140	-.4848	-.1598	.0557	.1632	.2804	.1413	-.2145	-.1845	-.2909	-.1281
270.000		1.0000							.4873						
X LT	.7460	.8530	.9280												
PHI															
.000	.0158	.0265	-.1565												
30.000	.0276	.0459	-.1497												
60.000	.0357	.0623	-.0191												
90.000	.0126	.0363													
120.000	.0552	.0215	-.1696												
135.000	.0520	.0093	-.2505												
150.000	.0243	-.0774	-.2369												
165.000	.0485	.0073	-.3125												
180.000	.0496	.0107	-.4201												

ALPHAT(3) = -.990 BETAT (5) = 9.260

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.0650	.8077	.4026	-.1030	-.4587	-.5314	-.4366	-.0725	.0126	-.1179	-.3038	-.2849	-.0687	-.0509	-.0674
30.000			.3101	-.1983	-.5248	-.5927	-.1361	-.0847	.0507	-.0892	-.3621	-.2695	-.0354	-.0303	-.0328
60.000			.2645	-.2359	-.5527	-.5986	-.1393	-.0702	.2855	-.2696	-.4592	-.1725	-.0620	-.0380	-.0343
90.000		.6821	.2474	-.2455	-.5603	-.1844	-.1150	-.0101	.5952		-.6235	-.1216	-.0373	-.1239	-.1443
120.000			.2687	-.2246	-.5488	-.1013	-.0704	-.1436	.1456	-.0771	-.2655	-.1593	-.1861	-.2501	-.1272
135.000								-.0336		.0886		-.2342		-.2805	
150.000			.3248	-.1179	-.5113	-.2371	-.0743	-.0334	.1687	.1957	-.2939	-.4240	-.4356	-.3912	-.1728
165.000				-.1271	-.4727	-.5412	-.0998	.0041	.1371	.2280	-.0153	-.2846	-.2262	-.3019	-.1720
180.000	1.0950	.8176	.4483	-.0743	-.4539	-.5241	-.1367	.0455	.0975	.2304	.1323	-.1603	-.2653	-.3610	-.1794
270.000		1.0800							.4712						
X LT	.7460	.8533	.9240												

ARC11-716 .A14 O1+T12+S12N25 EXTERNAL TANK (RB1T46)

ALPHAT(3) = -.590 BETAT (5) = 8.260

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0265	-.0101	-.1924
30.000	.0056	.0149	-.1701
60.000	.0096	.0290	-.0344
90.000	-.0751	-.0406	
120.000	.0069	-.0137	-.1950
135.000	.0052	-.0188	-.2776
150.000	-.0312	-.1415	-.2933
165.000	-.0148	-.0353	-.3370
180.000	-.0271	-.0596	-.4964

ALPHAT(4) = 4.020 BETAT (1) = -8.290

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1800	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0870	.9129	.5286	.0130	-.3718	-.4460	-.5361	.0129	.0302	-.0775	-.1759	-.2215	-.0425	-.0498	-.0591
30.000			.6468	.1259	-.2778	-.3582	-.4326	.0561	.0871	-.1639	-.1481	-.1289	-.0295	-.0308	-.0220
60.000			.7033	.1823	-.2264	-.2991	-.0095	.2143	.2595	-.3652	-.2857	-.1302	.0426	.0287	.0281
90.000		1.0680	.6708	.1572	-.2520	-.3278	.1004	.3095	.4414		-.4432	-.2660	-.1795	-.1147	-.0393
120.000			.5617	.0541	-.3354	-.4123	-.0976	.0850	.0801	-.4355	-.5179	-.1428	.1679	.0320	.0136
135.000								.0334		-.0205		-.1146		-.0132	
150.000			.4599	-.0566	-.4187	-.4913	-.4245	.0215	.0131	.2050	.0245	-.1348	-.0142	-.1362	-.0423
165.000				-.1311	-.4804	-.5536	-.2053	-.0243	.0531	.2395	.0993	-.0657	-.0420	-.1812	-.0232
180.000	1.0870	.7878	.3283	-.1826	-.5069	-.5739	-.1340	-.0366	.1086	.2421	.0727	-.1473	-.1085	-.1531	-.0594
270.000		.6651							.5971						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0251	-.0148	-.1763
30.000	.0234	.0532	-.1428
60.000	.0749	.1287	-.0311
90.000	.0653	.0517	
120.000	.1945	.2434	.1404
135.000	.2030	.2320	.0712
150.000	.1527	.1504	.1661
165.000	.1596	.1528	-.1864
180.000	.1232	.1046	-.2306

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T46)

ALPHAT(4) = 4.030 BETAT (2) = -4.150

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1420	.9777	.5679	.0397	-.3472	-.4248	-.5171	.0327	.1204	-.0073	-.2036	-.2815	.0169	.0074	-.0082
30.000			.6145	.0850	-.3104	-.3936	-.4824	.0963	.1555	-.0774	-.1846	-.2527	.0024	.0024	.0015
60.000			.6115	.0850	-.3082	-.3840	-.2482	.2151	.2946	-.3069	-.2993	-.2183	.0028	.0326	.0180
90.000		.9815	.5604	.0425	-.3451	-.4243	-.0147	.3261	.4591		-.5257	-.2990	-.0291	-.0352	-.0369
120.000			.4822	-.0339	-.4027	-.4781	-.1560	.1335	.1377	-.3384	-.5067	-.2329	.0564	-.0299	-.0351
135.000								.0666		-.0041		-.2327		-.0611	
150.000			.4212	-.0983	-.4581	-.5208	-.1894	.0181	.1030	.2081	.0156	-.2069	-.0753	-.1657	-.0704
165.000				-.1438	-.4925	-.5554	-.1256	-.0428	.1278	.2440	.0807	-.1130	-.0861	-.1380	-.0476
180.000	1.1420	.8024	.3520	-.1733	-.5010	-.5593	-.1104	-.0415	.1246	.2214	.0940	-.1599	-.1226	-.1431	-.0650
270.000		.7812							.5292						

X/LT	.7460	.8530	.9280
PHI			
.000	.0314	.0495	-.1047
30.000	.0460	.0779	-.0940
60.000	.0689	.1216	.0117
90.000	.0825	.1354	
120.000	.1557	.1878	.0417
135.000	.1602	.1735	-.0215
150.000	.1279	.1019	.0651
165.000	.1441	.1223	-.2425
180.000	.1188	.0933	-.2589

ALPHAT(4) = 4.020 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1610	.9950	.5727	.0431	-.3439	-.4219	-.5139	.0492	.1487	.0105	-.2150	-.2709	.0242	.0223	.0103
30.000			.5579	.0262	-.3615	-.4398	-.5240	.0552	.1859	-.0301	-.2382	-.2682	.0138	.0078	-.0039
60.000			.5102	-.0156	-.3939	-.4634	-.1282	.1017	.3252	-.2569	-.3238	-.2115	-.0247	.0022	-.0094
90.000		.8863	.4517	-.0708	-.4327	-.5044	-.0543	.2218	.4857		-.6446	-.2917	-.0234	-.0566	-.0744
120.000			.4010	-.1215	-.4669	-.5396	-.1180	.0564	.3080	-.3236	-.4317	-.1896	-.0177	-.0867	-.0462
135.000								-.0162		.0182		-.2433		-.1169	
150.000			.3771	-.1531	-.4848	-.5545	-.1358	-.0348	.1846	.2231	-.1347	-.2404	-.1573	-.2069	-.0902
165.000				-.1572	-.4967	-.5571	-.1186	-.0405	.1688	.2570	.0487	-.2191	-.1171	-.1567	-.0530
180.000	1.1610	.8024	.3636	-.1633	-.5032	-.5614	-.1094	-.0568	.1650	.2509	.1142	-.2576	-.1312	-.1523	-.0348
270.000		.8906							.4853						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T46)

ALPHAT(4) = 4.020 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0468	.0692	-.0998
30.000	.0478	.0601	-.1000
60.000	.0530	.0999	.0025
90.000	.0666	.1331	
120.000	.1262	.1344	-.0481
135.000	.1258	.1199	-.1226
150.000	.0933	.0589	-.0731
165.000	.1263	.0946	-.2660
180.000	.1252	.0931	-.2735

ALPHAT(4) = 3.010 BETAT (4) = 4.160

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1420	.9691	.5575	.0319	-.3470	-.4292	-.5228	.0350	.1128	-.0168	-.2060	-.2897	.0183	.0034	-.0089
30.000			.4779	-.0462	-.4101	-.4891	-.3101	-.0020	.1685	-.0118	-.2902	-.2327	.0116	-.0052	-.0123
60.000			.4033	-.1239	-.4693	-.5341	-.0845	.0046	.2834	-.1957	-.3598	-.1430	-.0224	-.0370	-.0344
90.000		.7818	.3409	-.1696	-.5012	-.5627	-.0911	.0425	.5350		-.7430	-.1932	-.0635	-.0738	-.0389
120.000			.3152	-.1877	-.5221	-.5847	-.1006	-.0235	.2536	-.2832	-.4179	-.1000	-.1026	-.1539	-.0490
135.000								-.0408		.0317		-.1696		-.1721	
150.000			.3227	-.1896	-.5205	-.5659	-.1032	-.0461	.1128	.1685	-.2391	-.2838	-.2510	-.3068	-.0926
165.000				-.1721	-.5006	-.5689	-.0938	-.0524	.1216	.2024	-.0199	-.2095	-.1197	-.1428	-.0657
180.000	1.1420	.8079	.3544	-.1629	-.4997	-.5666	-.1006	-.0342	.1133	.2180	.1101	-.2563	-.1070	-.1545	-.0784
270.000		.9903							.4626						

X/LT	.7460	.8530	.9280
PHI			
.000	.0269	.0499	-.1055
30.000	.0286	.0595	-.1171
60.000	.0245	.0692	-.0460
90.000	.0584	.0936	
120.000	.0778	.0631	-.1337
135.000	.0672	.0492	-.2292
150.000	.0424	-.0394	-.2190
165.000	.0657	.0343	-.2933
180.000	.0724	.0313	-.4071

ARC11-716 IA14 OI+T12+S12N25 EXTERNAL TANK (R91T46)

ALPHAT(4) = 4.030 BETAT (5) = 8.320

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0830	.9154	.5214	.0111	-.3714	-.4470	-.5411	-.0099	.0292	-.0935	-.1862	-.2689	-.0371	-.0414	-.0556
30.000			.3869	-.1241	-.4735	-.5511	-.2074	-.0601	.1198	-.0169	-.2731	-.1687	-.0097	-.0288	-.0479
60.000			.2877	-.2197	-.5382	-.2810	-.1009	-.0703	.1394	-.1722	-.4004	-.0926	-.0383	-.0565	-.0545
90.000		.6634	.2342	-.2568	-.5697	-.1815	-.1119	-.0609	.5850		-.6310	-.1067	-.0894	-.0986	-.0623
120.000			.2254	-.2753	-.5777	-.1821	-.1079	-.0644	.1763	-.1977	-.3735	-.1258	-.1741	-.1989	-.0885
135.000								-.0816		.0284		-.2188		-.2097	
150.000			.2460	-.2519	-.5688	-.1577	-.1072	-.0765	.0698	.1369	-.3123	-.3803	-.3175	-.3186	-.1330
165.000				-.2205	-.5438	-.3633	-.1240	-.0759	.1000	.1729	-.0526	-.2474	-.1737	-.2328	-.1427
180.000	1.0830	.7244	.3258	-.1862	-.5181	-.5826	-.1138	-.0213	.0549	.1761	.0749	-.2344	-.1854	-.2811	-.1598
270.000		1.0730							.4466						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0271	-.0118	-.1677
30.000	-.0038	.0125	-.1495
60.000	.0062	.0414	-.0726
90.000	.0275	.0551	
120.000	.0354	.0198	-.1630
135.000	.0245	.0121	-.2628
150.000	-.0203	-.1088	-.2722
165.000	.0102	-.0170	-.3259
180.000	-.0084	-.0471	-.5021

ALPHAT(5) = 8.080 BETAT (1) = -8.290

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0390	.9983	.6300	.1168	-.2804	-.3517	-.4484	-.0470	.0587	-.0319	-.0917	-.1739	-.0278	-.0146	-.0263
30.000			.7446	.2283	-.1846	-.2640	-.3211	.0940	.1448	-.0811	-.0491	-.1095	.0272	.0385	.0359
60.000			.7536	.2388	-.1752	-.2491	.0289	.2489	.3322	-.2562	-.1523	-.1131	.0868	.0868	.0711
90.000		1.0180	.6401	.1359	-.2644	-.3387	.0652	.2611	.3558		-.3859	-.2576	.0242	.0600	.0287
120.000			.4696	-.0259	-.4055	-.4754	-.1864	-.0287	-.0741	-.1507	-.3986	-.2194	.0736	.0948	.0592
135.000								-.0521		-.0068		-.2223		.0801	
150.000			.3433	-.1514	-.5023	-.5687	-.2753	-.0579	-.0809	.1830	-.1031	-.2134	-.0045	-.0551	-.0022
165.000				-.2296	-.5565	-.6259	-.1743	-.1022	.0221	.1970	.0581	-.0922	-.0202	-.0685	.0185
180.000	1.0390	.6764	.2275	-.2714	-.5752	-.2380	-.1529	-.1111	.0599	.1830	.0515	-.1768	-.0867	-.0926	-.0191
270.000		.6165							.4978						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25 EXTERNAL TANK (RB1T46)

ALPHAT(5) = 8.080 BETAT (1) = -8.290

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0087	.0121	-.1155
30.000	.0609	.0945	-.0639
60.000	.1071	.1618	.0394
90.000	.1225	.1930	
120.000	.1743	.2306	.0556
135.000	.1929	.2366	.0204
150.000	.1439	.1381	.1317
165.000	.1610	.1430	-.2273
180.000	.1253	.1033	-.2567

ALPHAT(5) = 0.030 BETAT (2) = -4.140

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0910	1.0800	.6716	.1433	-.2619	-.3454	-.4398	.0733	.1391	.0317	-.1255	-.1392	.0222	.0252	.0161
30.000			.7047	.1792	- 2374	-.3221	-.4102	.1386	.1933	-.0133	-.1045	-.1207	.0358	.0393	.0318
60.000			.6466	.1287	-.2789	-.3508	-.2271	.2499	.3493	-.2078	-.1880	-.1234	.0446	.0533	.0329
90.000		.9246	.5259	.0194	-.3685	-.4463	-.0272	.2797	.3640		-.4096	-.3297	-.0455	.0093	-.0079
120.000			.3932	-.1103	-.4683	-.5441	-.1723	.0363	-.0101	-.1564	-.4269	-.3402	.0059	.0376	.0112
135.000								-.0154		.0044		-.3190		.0018	
150.000			.3118	-.2013	-.5264	-.5903	-.1479	-.0584	.0157	.1816	-.0668	-.2944	-.0921	-.0848	-.0358
165.000				-.2364	-.5642	-.3906	-.1371	-.0949	.0706	.1973	.0498	-.1398	-.0740	-.0588	-.0130
180.000	1.0920	.6874	.2424	-.2588	-.5692	-.2150	-.1210	-.0885	.0630	.1688	.0881	-.1784	-.1057	-.0796	-.0337
270.000		.7306							.4171						

X/LT	.7460	.8530	.9280
PHI			
.000	.0446	.0711	-.0650
30.000	.0695	.1125	-.0463
60.000	.0817	.1429	.0627
90.000	.1076	.1865	
120.000	.1502	.1976	.0050
135.000	.1615	.1859	-.0527
150.000	.1286	.1008	.0363
165.000	.1468	.1209	-.2664
180.000	.1226	.0944	-.2749

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T46)

ALPHAT(5) = 8.070 BETAT (3) = .080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1110	1.0790	.6803	.1572	-.2527	-.3351	-.4330	.0821	.1700	.0532	-.1454	-.0616	.0377	.0289	.0202
30.000			.6369	.1171	-.2880	-.3703	-.4610	.1109	.2115	.0245	-.1743	-.0310	.0317	.0169	.0121
60.000			.5370	.0207	-.3635	-.4380	-.4568	.1655	.3686	-.1495	-.2227	-.0089	.0174	-.0011	-.0115
90.000		.8307	.4191	-.0890	-.4511	-.5224	-.1065	.1937	.3829		-.4893	-.1644	-.0820	-.0747	-.0263
120.000			.3216	-.1849	-.5197	-.5810	-.1766	-.0432	.0698	-.2042	-.5333	-.2565	-.0186	-.0350	-.0177
135.000								-.0782		.0055		-.3080		-.0673	
150.000			.2762	-.2264	-.5490	-.6064	-.1657	-.0919	.0940	.1972	-.1152	-.2521	-.1342	-.1448	-.0748
165.000				-.2349	-.5535	-.3078	-.1534	-.1010	.0901	.2216	.0516	-.1741	-.0985	-.0943	-.0207
180.000	1.1110	.6873	.2576	-.2537	-.5592	-.2902	-.1297	-.1000	.0882	.2098	.1085	-.1811	-.1149	-.0858	-.0065
270.000		.8404							.3812						

X/LT	.7460	.8530	.9280
PHI			
.000	.0598	.0872	-.0553
30.000	.0591	.0957	-.079.
60.000	.0497	.1095	-.0376
90.000	.0850	.1050	
120.000	.1344	.1581	-.0186
135.000	.1261	.1397	-.1130
150.000	.1018	.0795	-.0591
165.000	.1330	.1174	-.2591
180.000	.1288	.1133	-.2778

ALPHAT(5) = 8.160 BETAT (4) = 4.210

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0930	1.0580	.6625	.1494	-.2626	-.3395	-.4380	.0473	.1427	.0247	-.1254	-.1886	.0206	.0224	.0078
30.000			.5528	.0435	-.3499	-.4260	-.5133	.0226	.1898	.0262	-.2060	-.1342	.0181	.0047	-.0174
60.000			.4186	-.0887	-.4525	-.5175	-.1908	.0012	.3796	-.1041	-.2601	-.0640	.0393	.0095	-.0189
90.000		.7249	.3106	-.1929	-.5285	-.5855	-.1366	-.0555	.4271		-.4559	-.0337	-.0201	-.0487	-.0258
120.000			.2471	-.2433	-.5663	-.5957	-.1499	-.1117	.1324	-.2093	-.5021	-.1827	-.0670	-.0871	-.0393
135.000								-.1021		.0213		-.2223		-.1256	
150.000			.2374	-.2721	-.5785	-.3966	-.1480	-.1085	.0721	.1715	-.1668	-.2474	-.1905	-.1989	-.0993
165.000				-.2647	-.5718	-.2216	-.1393	-.0980	.0661	.1893	.0025	-.2061	-.1038	-.1076	-.0366
180.000	1.0930	.6901	.2473	-.2582	-.5715	-.3876	-.1297	-.1048	.0838	.1820	.0864	-.2381	-.1000	-.0835	-.0548
270.000		.9430							.3702						

X/LT	.7460	.8530	.9280

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T46)

ALPHAT(5) = 8.160 BETAT (4) = 4.210

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0444	.0757	-.0627
30.000	.0380	.0690	-.0802
60.000	.0367	.0799	-.0521
90.000	.0620	.0800	
120.000	.0884	.0746	-.1185
135.000	.0768	.0603	-.2146
150.000	.0502	-.0206	-.1987
165.000	.0707	.0512	-.2892
180.000	.0774	.0405	-.4030

ALPHAT(5) = 8.110 BETAT (5) = 8.380

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0350	1.0030	.6300	.1268	-.2752	-.3491	-.4477	-.0794	.0628	-.0423	-.0981	-.1899	-.0469	-.0136	-.0298
30.000			.4534	-.0490	-.4172	-.4903	-.5715	-.0682	.1306	.0091	-.1869	-.2543	-.0363	-.0369	-.0598
60.000			.2957	-.1973	-.5293	-.5944	-.2394	-.0482	.3765	-.0585	-.2527	-.2106	.0297	.0175	-.0171
90.000		.6132	.2031	-.2796	-.5919	-.1980	-.1516	-.1541	.4685		-.4937	-.2220	-.0071	-.0746	-.0986
120.000			.1672	-.3040	-.5981	-.1643	-.1314	-.0931	.0596	-.1177	-.4789	-.1897	-.0764	-.1247	-.0595
135.000								-.0967		.0291		-.2368		-.1477	
150.000			.1741	-.3074	-.5990	-.1619	-.1335	-.1096	.0029	.0806	-.1967	-.3304	-.2320	-.2220	-.0851
165.000				-.2967	-.5962	-.1697	-.1233	-.0959	.0565	.1464	-.0435	-.2368	-.1361	-.1524	-.0961
180.000	1.0350	.6192	.2283	-.2797	-.5840	-.2474	-.1220	-.0820	.0373	.1381	.0394	-.2319	-.1418	-.2061	-.0995
270.000		1.0320							.3663						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0080	.0168	-.1043
30.000	-.0198	.0165	-.1081
60.000	.0353	.0807	-.0040
90.000	.0248	.0771	
120.000	.0604	.0626	-.1460
135.000	.0548	.0529	-.2337
150.000	.0005	-.0519	-.2354
165.000	.0463	.0216	-.3046
180.000	.0212	-.0083	-.4726

ARC11-716 IA14 01+T12+S12N25 EXTERNAL TANK (RB1T47) (14 FEB 74)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES
LREF = 38.7090 INCHES YMRP = .0000 INCHES
BREF = 38.7090 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 1.050 ELEVON = .000
RUDDER = .000 SPDBRK = .000

ALPHAT(1) = -8.730 BETAT (1) = -8.250

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6370
PHI															
.000	1.0740	.6787	.2962	-.1679	-.3384	-.3825	-.0705	-.1194	.0126	-.0175	-.2163	-.3053	-.1224	-.0770	-.0835
30.000			.3809	-.0943	-.2899	-.3468	-.4003	-.0711	-.0991	-.2814	-.4028	-.2185	-.1722	-.1514	-.1100
60.000			.5279	.0489	-.1912	-.2478	-.1621	-.0166	-.0732	-.5733	-.6720	-.3606	-.1416	.0132	-.0591
90.000		1.0620	.6963	.2155	-.0913	-.1417	.1261	.3519	.4151		-.4929	-.4916	-.1817	-.0819	-.0692
120.000			.8047	.3201	-.0047	-.0697	-.1487	.3735	.4741	.0321	.2352	.1766	.0546	-.0571	-.1057
135.000								.3222		.2877		.1645		-.0699	
150.000			.8270	.3355	.0109	-.0552	-.2469	.2831	.3654	.4629	.3653	.1409	-.0675	-.2087	-.1785
165.000				.3170	-.0210	-.0896	-.2818	.2135	.3263	.4738	.3416	.1302	-.0710	-.2368	-.2135
180.000	1.0740	1.1230	.7260	.2654	-.0627	-.1250	-.3115	.1557	.3107	.4535	.2781	.0361	-.1009	-.2798	-.2619
270.000		.6851							.4053						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0380	.0446	-.0851
30.000	-.0829	.0401	-.0450
60.000	-.0399	.0140	.0135
90.000	.0193	-.0891	
120.000	.0955	-.0509	.1611
135.000	.0932	-.0267	.0859
150.000	.0425	-.0658	.1513
165.000	.0238	-.0232	-.1296
180.000	-.0239	-.0243	-.1514

ALPHAT(1) = -8.690 BETAT (2) = -4.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6370
PHI															
.000	1.1230	.7218	.3218	-.1444	-.4544	-.5058	-.1634	-.1069	.0336	.0370	-.1823	-.3666	-.0859	-.0375	-.0981
30.000			.3658	-.1134	-.4325	-.4885	-.4550	-.1084	.0058	-.1977	-.3648	-.2196	-.1558	-.1075	-.1010
60.000			.4622	-.0254	-.3571	-.4218	-.3304	-.0328	-.0353	-.4631	-.6628	-.3355	-.2089	-.0193	-.0558
90.000		.9838	.5962	.1092	-.2622	-.3324	-.0406	.3350	.4068		-.4834	-.5240	-.1796	-.0997	-.1053
120.000			.7144	.2256	-.1691	-.2483	-.3232	.3425	.4864	.0887	.1808	.1036	-.0228	-.1187	-.1930
135.000								.3023		.3069		.0925		-.1494	
150.000			.7758	.2766	-.1315	-.2012	-.3172	.2815	.3947	.4569	.1800	.1159	-.1545	-.2844	-.2659

ARC11-716 IA14 01+T12+S12N25 EXTERNAL TANK (RB1T47)

ALPHAT(1) = -8.000 BETAT (2) = -4.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
165.000				.2761	-.1235	-.2062	-.3030	.2394	.3709	.4916	.2847	.0671	-.1455	-.2435	-.2511
180.000	1.1830	1.1460	.7513	.2476	-.1478	-.2211	-.3162	.1852	.3634	.4857	.2926	.0003	-.1473	-.2648	-.2641
270.000		.7849							.4009						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0425	.0470	-.1014
30.000	-.0477	.0427	-.0483
60.000	-.0130	.0382	.0567
90.000	.0216	.0236	
120.000	.0534	-.0531	.0339
135.000	.0392	-.0571	-.0314
150.000	-.0051	-.1006	.0077
165.000	.0003	-.0561	-.1975
180.000	-.0383	-.0570	-.2027

ALPHAT(1) = -8.680 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1400	.7424	.3319	-.1526	-.4391	-.4974	-.1589	-.0986	.0486	.0651	-.1650	-.3823	-.0671	-.0228	-.0419
30.000			.3473	-.1215	-.4317	-.4957	-.3911	-.1087	.0341	-.0907	-.3222	-.2615	-.1087	-.0838	-.0810
60.000			.4001	-.0890	-.4020	-.4583	-.2397	-.1180	.0432	-.3590	-.6453	-.3002	-.2448	-.0844	-.0574
90.000		.8951	.4959	.0102	-.3313	-.4029	-.0627	.1417	.4089		-.4874	-.5491	-.1737	-.1204	-.1397
120.000			.6124	.1265	-.2435	-.3227	-.4030	.2173	.5028	.1695	.1197	.0249	-.0773	-.1838	-.2558
135.000								.2182		.3252		.0225		-.2414	
150.000			.7067	.2088	-.1764	-.2546	-.3657	.2186	.4048	.4468	.0757	-.0916	-.2370	-.3785	-.3599
165.000				.2505	-.1441	-.2256	-.3231	.2137	.3859	.4897	.2271	.0315	-.0962	-.2434	-.2531
180.000	1.1400	1.1460	.7584	.2540	-.1392	-.2160	-.3140	.1807	.3865	.4793	.3044	-.0341	-.1174	-.2683	-.2638
270.000		.8915							.3985						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0219	.0402	-.1242
30.000	-.0382	.0476	-.0756
60.000	.0021	.0619	.1000
90.000	-.0064	.0194	
120.000	.0061	-.0360	-.1121
135.000	-.0161	-.0482	-.1779
150.000	-.0282	-.1234	-.1716

ARC11-716 IA14 O1+T12-5.2N25 EXTERNAL TANK (RB1T47)

ALPHAT(1) = -8.600 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
165.000	-.0145	-.0616	-.2086
180.000	-.0219	-.0554	-.1907

ALPHAT(1) = -8.680 BETAT (4) = 4.150

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1230	.7245	.3226	-.1408	-.4545	-.5083	-.1657	-.1053	.0290	.0314	-.1831	-.3707	-.0909	-.0367	-.0587
30.000			.3096	-.1691	-.4609	-.5147	-.1732	-.1139	-.0109	-.0344	-.2745	-.3364	-.0867	-.0589	-.0930
60.000			.3251	-.1436	-.4492	-.5042	-.1587	-.1434	.1213	-.2383	-.6276	-.2845	-.1957	-.1372	-.0933
90.000		.7901	.3902	-.0922	-.4158	-.4738	-.0845	-.0652	.4326		-.4984	-.5805	-.1959	-.1312	-.1577
120.000			.5014	.0162	-.3362	-.4056	-.3269	.0990	.5177	.2323	.0656	-.0398	-.1191	-.2406	-.2476
135.000								.1194		.3165		-.0714		-.3051	
150.000			.6174	.1256	-.2508	-.3208	-.4306	.1346	.3757	.4062	-.0643	-.2537	-.3333	-.4899	-.3168
165.000				.1988	-.1864	-.2603	-.3657	.1649	.3494	.4504	.1965	-.0052	-.1072	-.2145	-.2468
180.000	1.1230	1.1400	.7481	.2411	-.1492	-.2239	-.3220	.1728	.3485	.4501	.3034	-.0417	-.1224	-.2850	-.2927
270.000		.9824							.3966						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0445	.0495	-.1041
30.000	-.0554	.0416	-.1018
60.000	-.0210	.0679	.0721
90.000	-.0760	-.0744	
120.000	-.0728	-.0845	-.2037
135.000	-.0958	-.0968	-.2761
150.000	-.1149	-.1891	-.2898
165.000	-.0841	-.0983	-.3050
180.000	-.0715	-.1056	-.3958

ARC1:-716 IA14 01+T12+S12N25 EXTERNAL TANK (RB1T47)

ALPHAT(1) = -8.720 BETAT (5) = 8.320

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0650	.6675	.2832	-.1713	-.4737	-.5277	-.1582	-.1176	.0047	-.0138	-.2149	-.2987	-.1255	-.0760	-.0803
30.000			.2555	-.2078	-.4843	-.5360	-.1386	-.1117	-.0661	-.1028	-.2742	-.3681	-.1247	-.0885	-.1099
60.000			.2551	-.2105	-.4838	-.4354	-.1383	-.1471	.0874	-.1976	-.6132	-.2600	-.1392	-.1320	-.1274
90.000		.6822	.2893	-.1700	-.4721	-.4783	-.1216	-.2030	.4473		-.4880	-.5823	-.2114	-.1417	-.1987
120.000			.3873	-.0825	-.4096	-.4776	-.2390	.0024	.5193	.2657	.0472	-.0751	-.1722	-.2958	-.3046
135.000								.0244		.2910		-.1249		-.3695	
150.000			.5203	.0391	-.3159	-.3825	-.4852	.0384	.3258	.3080	-.1597	-.3123	-.4572	-.5588	-.3506
165.000				.1486	-.2245	-.2988	-.3961	.0495	.2723	.3737	.1614	-.0158	-.1156	-.2958	-.3233
180.000	1.0650	1.0360	.7212	.2232	-.1618	-.2368	-.3048	.1107	.2625	.4006	.2905	-.0063	-.1718	-.3336	-.3634
270.000		1.0600							.3997						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0534	.0492	-.0849
30.000	-.0433	.0594	-.0988
60.000	-.0350	.0800	.0569
90.000	-.1689	-.2487	
120.000	-.1384	-.1108	-.2247
135.000	-.1696	-.1076	-.2859
150.000	-.1890	-.1911	-.3060
165.000	-.1659	-.1243	-.3293
180.000	-.1627	-.1770	-.4444

ALPHAT(2) = -4.340 BETAT (1) = -8.300

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1300	.7902	.4044	-.0906	-.4118	-.4700	-.5320	-.1006	.0182	-.0328	-.2479	-.2643	-.0913	-.0484	-.0845
30.000			.4998	.0121	-.3337	-.4077	-.4867	-.0930	.0068	-.2357	-.3616	-.1626	-.1497	-.1165	-.0708
60.000			.6255	.1304	-.2391	-.3137	-.4162	.0977	.1012	-.4750	-.5743	-.2832	-.1278	.0372	-.0138
90.000		1.1160	.7276	.2302	-.1603	-.2390	-.1530	.3729	.5008		-.6064	-.4853	-.1276	-.0479	-.0342
120.000			.7601	.2674	-.1338	-.2148	-.3090	.2891	.3805	-.1254	.1320	.1804	.0650	-.0447	-.0897
135.000								.2052		.1437		.1019		-.0560	
150.000			.7321	.2316	-.1603	-.2383	-.3485	.1600	.2696	.3574	.2610	.1235	-.0782	-.2039	-.1603
165.000				.1751	-.2100	-.2859	-.3828	.0899	.2402	.3996	.2934	.1062	-.0633	-.2319	-.1895
180.000	1.1300	1.0430	.6155	.1150	-.2485	-.3249	-.4058	.0500	.2391	.4060	.2334	.0139	-.1119	-.2833	-.2336
270.000		.7337							.5557						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 C1+T12+S12N25 EXTERNAL TANK (RB1T47)

ALPHAT(2) = -4.340 BETAT (1) = -8.300

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0959	.0450	-.0895
30.000	-.0896	.0588	-.0585
60.000	-.0190	.1254	.0523
90.000	.0430	.1127	
120.000	.0946	.1276	.1756
135.000	.1009	.1181	.1125
150.000	.0618	.0830	.1911
165.000	.0511	.0949	-.1284
180.000	.0149	.0609	-.1528

ALPHAT(2) = -4.320 BETAT (2) = -4.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1810	.8373	.4286	-.0653	-.3889	-.4504	-.5225	-.0782	.0451	.0319	-.1872	-.3445	-.0525	.0000	-.0325
30.000			.4772	-.0191	-.3532	-.4220	-.4960	-.0806	.0956	-.1264	-.2987	-.2234	-.1135	-.0684	-.0629
60.000			.5518	.0529	-.3004	-.3680	-.4680	.0326	.1497	-.4365	-.5653	-.2467	-.1953	-.0276	-.0167
90.000		1.0320	.6277	.1295	-.2439	-.3148	-.3997	.2740	.5087		-.5899	-.5243	-.1444	-.0715	-.0773
120.000			.6751	.1776	-.2062	-.2831	-.3766	.1943	.4202	-.0555	.0773	.0973	-.0107	-.1027	-.1708
135.000								.1521		.2015		.0680		-.1242	
150.000			.6894	.1430	-.2023	-.2731	-.3866	.1205	.3265	.3752	.1027	.1003	-.1420	-.2601	-.2406
165.000				.1626	-.2127	-.2900	-.3906	.0777	.3032	.4255	.2369	.0477	-.1442	-.2486	-.2201
180.000	1.1810	1.0610	.6435	.1333	-.2372	-.3086	-.4003	.0439	.2896	.4293	.2480	-.0176	-.1525	-.2776	-.2275
270.000		.8446							.5675						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0698	.0479	-.0919
30.000	-.0630	.0675	-.0430
60.000	-.0236	.1045	.0709
90.000	.0093	.1160	
120.000	.0513	.0623	.0790
135.000	.0441	.0461	.0320
150.000	.0085	.0028	.1040
165.000	.0237	.0339	-.1866
180.000	-.0376	.0143	-.1913

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T47)

ALPHAT(2) = -4.380 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1980	.8907	.4333	-.0551	-.3886	-.4517	-.5211	-.0726	.0636	.0619	-.1630	-.3390	-.0525	.0180	-.0811
30.000			.4405	-.0517	-.3790	-.4429	-.5154	-.0699	.0639	-.0296	-.2478	-.3261	-.0643	-.0201	-.0579
60.000			.4765	-.0310	-.3580	-.4212	-.5129	-.0497	.2099	-.3875	-.5551	-.2042	-.1253	-.0935	-.0486
90.000		.9438	.5255	.0279	-.3253	-.3925	-.2687	.0941	.5303		-.6167	-.5692	-.1598	-.0940	-.1178
120.000			.5913	.0854	-.2840	-.3559	-.4120	.0925	.4318	.0241	.0277	.0006	-.0646	-.1684	-.2261
135.000								.0937		.2387		-.0172		-.2122	
150.000			.6304	.1235	-.2525	-.3218	-.4300	.0909	.3267	.3558	.0151	-.1300	-.2217	-.3421	-.3085
165.000				.1592	-.2370	-.3134	-.4065	.0851	.3049	.4132	.1751	-.0079	-.1149	-.2526	-.2519
180.000	1.1960	1.0630	.6483	.1387	-.2377	-.3056	-.4028	.0508	.2896	.4096	.2586	-.0723	-.1313	-.2786	-.2275
270.000		.9432							.5247						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0474	.0636	-.0892
30.000	-.0573	.0590	-.0741
60.000	-.0226	.0876	.0731
90.000	-.0083	.0742	
120.000	.0252	.0256	-.0510
135.000	.0058	.0129	-.1204
150.000	-.0135	-.0546	-.1054
165.000	.0002	-.0027	-.1925
180.000	.0039	.0041	-.1997

ALPHAT(2) = -4.380 BETAT (4) = 4.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1790	.8371	.4286	-.0665	-.3866	-.4520	-.5233	-.0767	.0423	.0280	-.1897	-.3395	-.0572	.0003	-.0309
30.000			.3997	-.0827	-.4031	-.4668	-.5022	-.0765	.0111	.0021	-.2354	-.3226	-.0519	-.0136	-.0421
60.000			.3956	-.0866	-.4017	-.4602	-.1920	-.0785	.1425	-.3059	-.5351	-.1589	-.0757	-.0742	-.0906
90.000		.8460	.4231	-.0681	-.3871	-.4513	-.0741	-.0409	.5725		-.5316	-.4971	-.1624	-.1085	-.1336
120.000			.4793	-.0128	-.3485	-.4176	-.0150	.0215	.2593	.1231	-.0016	-.0470	-.1098	-.2098	-.2230
135.000								.0186		.2609		-.0869		-.2694	
150.000			.5551	.0518	-.3017	-.3717	-.2934	.0161	.2831	.3405	-.1000	-.2659	-.3126	-.4486	-.3043
165.000				.1071	-.2616	-.3366	-.4321	.0628	.2729	.3870	.1525	-.0430	-.1125	-.1910	-.2324
180.000	1.1790	1.0630	.5406	.1340	-.2367	-.3107	-.4058	.0603	.2639	.3803	.2060	-.0682	-.1243	-.2461	-.2651
270.000		1.0370							.5010						

X/LT	.7460	.8530	.9280
PHI			

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ARC11-716 IA14 OI+T12+S12N25 EXTERNAL TANK (RB1T47)

ALPHAT(2) = -4.380 BETAT (4) = 4.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L*	.7460	.8530	.9200
PHI			
.000	-.0715	.0462	-.0932
30.000	-.0580	.0621	-.0869
60.000	-.0535	.0711	.0537
90.000	-.0533	.0132	
120.000	-.0425	-.0249	-.1595
135.000	-.0670	-.0508	-.2318
150.000	-.0777	-.1178	-.2431
165.000	-.0566	-.0398	-.2813
180.000	-.0461	-.0362	-.3607

ALPHAT(2) = -4.400 BETAT (5) = 8.270

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L*	.0330	.0590	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3340	.4510	.5090	.5580	.6380
PHI															
.000	1.1110	.7817	.3890	-.0955	-.4109	-.4709	-.5121	-.1116	.0002	-.0621	-.2499	-.2511	-.0933	-.0524	-.0833
30.000			.3274	-.1384	-.4426	-.5050	-.1567	-.0967	-.0266	-.0740	-.2872	-.2369	-.0584	-.0336	-.0632
60.000			.3086	-.1697	-.4511	-.5031	-.1272	-.0973	.0095	-.2381	-.4626	-.1339	-.0626	-.0613	-.0977
90.000		.7361	.3221	-.1398	-.4484	-.1454	-.0802	-.0967	.4233		-.5342	-.2626	-.1698	-.1278	-.1697
120.000			.3777	-.1040	-.4191	-.3079	-.0504	-.0516	.2119	.1212	.0043	-.0946	-.1763	-.2715	-.8570
135.000								-.0559		.2631		-.1421		-.3493	
150.000			.4527	-.0284	-.3623	-.4274	-.2516	-.0431	.2349	.2791	-.1220	-.3207	-.4662	-.5292	-.3110
165.000				.0523	-.3024	-.3745	-.4709	.0209	.1958	.3194	.1202	-.0550	-.1360	-.2962	-.2938
180.000	1.1240	.9098	.5146	.1114	-.2731	-.3302	-.4231	.0394	.1844	.3255	.2551	-.0372	-.1857	-.3430	-.3326
270.000		1.1130							.4906						

X/L*	.7463	.8537	.9200
PHI			
.000	-.0996	.0468	-.0936
30.000	-.0655	.0701	-.0963
60.000	-.0619	.0794	.0417
90.000	-.1125	-.0213	
120.000	-.0930	-.0474	-.2031
135.000	-.1161	-.0508	-.2571
150.000	-.1342	-.1147	-.2741
165.000	-.1225	-.0674	-.2079
180.000	-.1251	-.0713	-.4277

ARC11-716 IA14 OL+T12+S12N25 EXTERNAL TANK (RB1T47)

ALPHAT(3) = -.310 BETAT (1) = -8.320

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1430	.8782	.4967	.0007	-.3396	-.4074	-.4923	-.1643	.0481	-.0236	-.2249	-.2208	-.1368	-.0359	-.0689
30.000			.6074	.1125	-.2564	-.3339	-.4186	-.0892	.0719	-.1626	-.2922	-.1380	-.1297	-.1044	-.0521
60.000			.7036	.2048	-.1782	-.2550	-.3662	.1700	.2170	-.3650	-.3247	-.1668	-.1377	.0059	.0240
90.000		1.1360	.7459	.2439	-.1465	-.2283	-.3219	.3684	.5236		-.5717	-.4889	-.1676	-.0741	-.0061
120.000			.7090	.2152	-.1733	-.2536	-.3490	.1837	.2685	-.2779	-.1514	.2161	.1302	.0073	-.0287
135.000								.0789		-.0403		.1285		-.0197	
150.000			.6412	.1452	-.2300	-.3066	-.4141	.0163	.1569	.2508	.2139	.0650	-.0375	-.1569	-.1033
165.000				.0731	-.2865	-.3596	-.4519	-.0215	.1456	.3261	.2318	.0901	-.0216	-.1618	-.1107
180.000	1.1430	.9545	.5126	.0162	-.3206	-.3952	-.4707	-.0388	.1453	.3451	.1866	.0019	-.0966	-.2209	-.1647
270.000		.7462							.5628						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0990	.0377	-.0971
30.000	-.0597	.0720	-.0653
60.000	.0096	.1599	.0591
90.000	.0636	.1561	
120.000	.1182	.2273	.2131
135.000	.1241	.2178	.1399
150.000	.0907	.1636	.2177
165.000	.0984	.1659	-.1016
180.000	.0611	.1181	-.1407

ALPHAT(3) = -.290 BETAT (2) = -4.160

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1990	.9370	.5304	.0223	-.3183	-.3875	-.4680	-.2521	.1071	.0575	-.1714	-.2788	-.1010	.0100	-.0080
30.000			.5819	.0743	-.2795	-.3545	-.4330	-.1661	.1424	-.0557	-.2351	-.1969	-.1072	-.0350	-.0390
60.000			.6305	.1220	-.2435	-.3146	-.4208	.0703	.2641	-.3133	-.4197	-.1487	-.0922	-.0918	-.0006
90.000		1.0560	.6452	.1430	-.2290	-.3038	-.4009	.2656	.5374		-.5753	-.5583	-.2004	-.0998	-.0374
120.000			.6277	.1313	-.2410	-.3151	-.4077	.0944	.3191	-.2080	-.1678	.0899	.0516	-.0567	-.1108
135.000								.0345		.0697		.0162		-.0850	
150.000			.5995	.0974	-.2671	-.3377	-.4415	.0058	.2273	.2951	.0568	.0365	-.0496	-.2104	-.1758
165.000				.0639	-.2917	-.3617	-.4564	-.0109	.1943	.3437	.1880	.0012	-.0673	-.2077	-.1587
180.000	1.1990	.9706	.5410	.0315	-.3100	-.3806	-.4637	-.0400	.1771	.3344	.2032	-.0595	-.0191	-.2282	-.1657
270.000		.8573							.5988						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 C1+T12+S12N25 EXTERNAL TANK (RB1T47)

ALPHAT(3) = -.290 BETAT (2) = -4.150

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0549	.0553	-.0775
30.000	-.0464	.0773	-.0530
60.000	-.0012	.1370	.0359
90.000	.0397	.1594	
120.000	.0777	.1698	.1473
135.000	.0790	.1540	.0784
150.000	.0582	.1000	.1630
165.000	.0643	.1158	-.1651
180.000	.0357	.0870	-.1741

ALPHAT(3) = -.610 BETAT (3) = .020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2160	.9462	.5294	.0182	-.3202	-.3882	-.4678	-.2928	.1226	.0815	-.1487	-.2853	-.0907	.0208	.0063
30.000			.5326	.0193	-.3221	-.3905	-.4664	-.0782	.1099	.0303	-.2078	-.2993	-.0769	.0023	-.0133
60.000			.5321	.0210	-.3182	-.3813	-.4784	-.0036	.3150	-.2614	-.4185	-.1837	-.0464	-.0268	-.0299
90.000		.9612	.5397	.0336	-.3127	-.3795	-.4683	.0958	.5655		-.6211	-.3606	-.1661	-.0939	-.0729
120.000			.5476	.0427	-.3086	-.3781	-.4635	.0380	.3758	-.1145	-.1447	.0138	-.0256	-.1241	-.1742
135.000								.0392		.1554		-.0776		-.1613	
150.000			.5571	.0477	-.3016	-.3689	-.4712	.0346	.1967	.3073	-.0502	-.1322	-.1521	-.2813	-.2547
165.000				.0519	-.3083	-.3706	-.4610	.0326	.1912	.3206	.1412	-.0553	-.0827	-.2037	-.1859
180.000	1.2160	.9784	.5583	.0464	-.3028	-.3696	-.4570	.0002	.1877	.3195	.2142	-.0994	-.0950	-.1788	-.1843
270.000		.9623							.5611						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0363	.0770	-.0616
30.000	-.0388	.0809	-.0474
60.000	-.0224	.1095	.0243
90.000	.0179	.1299	
120.000	.0516	.1015	.0213
135.000	.0373	.0900	-.0650
150.000	.0130	.0275	-.0474
165.000	.0347	.0714	-.1817
180.000	.0377	.0717	-.1902

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T47)

ALPHAT(3) = -.200 BETAT (4) = 4.140

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1980	.9333	.5256	.0180	-.3220	-.3925	-.4743	-.2918	.1087	.0511	-.1728	-.2778	-.1078	.0091	-.0070
30.000			.4740	-.0318	-.3555	-.4261	-.4959	-.0448	.0636	.0101	-.2146	-.3230	-.0671	-.0008	-.0229
60.000			.4459	-.0545	-.3725	-.4356	-.5142	-.0537	.2752	-.1918	-.3633	-.1981	-.0667	-.0051	-.0343
90.000		.8613	.4327	-.0554	-.3842	-.4486	-.1983	-.0180	.6058		-.[illegible]	-.0352	-.0269	-.0532	-.1299
120.000			.4486	-.0464	-.3734	-.4374	-.1507	-.0262	.2375	-.0393	-.[illegible]508	-.0063	-.0562	-.1624	-.1804
135.000								-.0173		.1706		-.0950		-.2024	
150.000			.4822	-.0253	-.3528	-.4177	-.1381	-.0101	.1174	.2317	-.1599	-.2428	-.2262	-.3692	-.2631
165.000				.0984	-.3309	-.4035	-.4506	-.0119	.1516	.2744	.1023	-.0898	-.0767	-.1706	-.1821
180.000	1.1980	.9719	.5384	.0280	-.3161	-.3860	-.4748	.0055	.1724	.2895	.2206	-.1190	-.0895	-.1986	-.2001
270.000		1.0550							.5363						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0608	.0608	-.0713
30.000	-.0559	.0860	-.0572
60.000	-.0456	.0932	.0670
90.000	-.0909	.0720	
120.000	-.0027	.0369	-.1084
135.000	-.0179	.0238	-.1889
150.000	-.0254	-.0492	-.1923
165.000	-.0083	.0193	-.2490
180.000	.0018	.0272	-.3465

ALPHAT(3) = -.210 BETAT (5) = 8.290

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1450	.8805	.4902	-.0006	-.3396	-.4114	-.4957	-.1426	.0489	-.0347	-.2229	-.2253	-.1597	-.0387	-.0668
30.000			.3979	-.0885	-.4104	-.4703	-.5272	-.0805	.0433	-.0404	-.2442	-.2815	-.0553	-.0064	-.0451
60.000			.3516	-.1260	-.4352	-.4907	-.1820	-.1045	.1015	-.1295	-.3193	-.1748	-.0620	-.0246	-.0666
90.000		.7538	.3329	-.1490	-.4435	-.5001	-.1307	-.0841	.6525		-.5168	-.0635	-.0240	-.0838	-.2055
120.000			.3500	-.1184	-.4352	-.4942	-.0944	-.0726	.0674	.0501	-.1576	-.0791	-.1158	-.2156	-.2123
135.000								-.0517		.0772		-.1390		-.2572	
150.000			.4036	-.0885	-.4082	-.4652	-.0645	-.0429	.0959	.2459	-.1512	-.3184	-.3335	-.4203	-.2660
165.000				-.0386	-.3710	-.4348	-.1867	-.0445	.1255	.2413	.0707	-.1007	-.1227	-.2491	-.2492
180.000	1.1450	.8711	.5129	.0097	-.3288	-.4022	-.4915	.0046	.1029	.2485	.1942	-.0762	-.1410	-.3088	-.2725
270.000		1.1360							.5240						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 OL+T12+S12N25 EXTERNAL TANK (RB1T47)

ALPHAT(3) = -.210 BETAT (5) = 8.290

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.1020	.0393	-.0965
30.000	-.0742	.0606	-.0819
60.000	-.0684	.0847	.0570
90.000	-.1210	-.0031	
120.000	-.0476	.0132	-.1379
135.000	-.0653	.0107	-.2118
150.000	-.0841	-.0787	-.2430
165.000	-.0655	-.0212	-.2689
180.000	-.0724	-.0356	-.4151

ALPHAT(4) = 4.030 BETAT (1) = -8.310

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1320	.9745	.5998	.1015	-.2654	-.3374	-.4279	-.3652	.0817	.0012	-.1593	-.1940	-.1373	-.0331	-.0356
30.000			.7124	.2112	-.1779	-.2584	-.3480	-.0092	.1383	-.0828	-.1397	-.1413	-.0731	-.0402	-.0116
60.000			.7662	.2652	-.1326	-.2094	-.3236	.2302	.3207	-.2516	-.2362	-.1306	.0078	-.0149	.0125
90.000		1.1190	.7356	.2384	-.1562	-.2358	-.3346	.3501	.4886		-.4098	-.3107	-.3006	-.2325	-.0584
120.000			.6329	.1410	-.2369	-.3132	-.4051	.0773	.1216	-.4227	-.4969	-.2245	.2231	.1102	.0316
135.000								-.0494		-.2449		-.1318		.0658	
150.000			.5313	.0371	-.3145	-.3843	-.4868	-.0897	.0314	.1945	.0428	-.1489	.0653	-.0838	-.0561
165.000				-.0367	-.3693	-.4411	-.5263	-.0719	.0495	.2724	.1414	-.0238	.0265	-.1138	-.0620
180.000	1.1320	.8516	.4093	-.0840	-.4020	-.4631	-.3788	-.1148	.0801	.2718	.1281	-.0781	-.0175	-.1608	-.1018
270.000		.7336							.6422						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0785	.0359	-.1147
30.000	-.0216	.0866	-.0738
60.000	.0363	.1642	.0411
90.000	.0564	.0813	
120.000	.1641	.2975	.2487
135.000	.1681	.2812	.1692
150.000	.1330	.2033	.2593
165.000	.1395	.2003	-.0911
180.000	.1024	.1462	-.1445

ARC11-716 IA14 01+T12+S12N25 EXTERNAL TANK (91T47)

ALPHAT(4) = 4.040 BETAT (2) = -4.140

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1870	1.0350	.6399	.1318	-.2403	-.3126	-.4035	-.3524	.1723	.0906	-.1109	-.2085	-.1385	.0109	.0257
30.000			.6842	.1759	-.2059	-.2851	-.3725	-.2279	.2092	.0229	-.1356	-.1922	-.1004	-.0089	.0252
60.000			.6812	.1765	-.2023	-.2755	-.3856	.1245	.3575	-.1904	-.2465	-.1972	-.0318	.0112	.0282
90.000		1.0370	.6338	.1357	-.2392	-.3126	-.4093	.2409	.5032		-.4992	-.2829	-.0102	-.0468	-.0385
120.000			.5593	.0596	-.2973	-.3657	-.4517	.0137	.1872	-.3345	-.4343	-.2197	.0892	.0329	-.0479
135.000								-.0374		-.0470		-.2190		0040	
150.000			.4978	-.0015	-.3395	-.4068	-.5041	-.0432	.1256	.2398	.0531	-.2074	-.0287	-.1163	-.1103
165.000				-.0409	-.3716	-.4347	-.5192	-.0539	.0931	.2818	.1398	-.0620	-.0468	-.0833	-.0930
180.000	1.1870	.8651	.4333	-.0661	-.3824	-.4483	-.2252	-.0814	.0823	.2376	.1653	-.0867	-.0403	-.0904	-.1006
270.000		.8474							.5734						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0203	.0790	-.0112
30.000	.0010	.1056	-.0084
60.000	.0252	.1507	.0717
90.000	.0483	.1649	
120.000	.1107	.2300	.1396
135.000	.1167	.2137	.0706
150.000	.1019	.1447	.1513
165.000	.1155	.1584	-.1535
180.000	.0876	.1257	-.1684

ALPHAT(4) = 4.040 BETAT (3) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/L*	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2020	1.0480	.6440	.1375	-.2372	-.3100	-.3989	-.3454	.1993	.1171	-.1033	-.2068	-.1248	.0130	.0319
30.000			.6297	.1209	-.2514	-.3265	-.4091	-.2343	.2020	.0823	-.1271	-.2023	-.1010	.0051	.0131
60.000			.5858	.0794	-.2820	-.3512	-.4511	.0454	.3707	-.1305	-.2461	-.1430	-.0648	-.0122	-.0082
90.000		.9439	.5278	.0281	-.3198	-.3895	-.4765	.0728	.5309		-.5859	-.2400	-.0912	-.0973	-.0665
120.000			.4801	-.0199	-.3495	-.4167	-.5009	-.0312	.2583	-.2847	-.3994	-.1283	.0190	-.0595	-.0946
135.000								-.0376		-.0157		-.2551		-.0818	
150.000			.4553	-.0439	-.3684	-.4308	-.5230	-.0457	.1056	.2476	-.0431	-.2224	-.0811	-.1734	-.1615
165.000				-.0489	-.3760	-.4419	-.3895	-.0583	.0823	.2809	.1380	-.1314	-.0517	-.1179	-.1115
180.000	1.2020	.8560	.4431	-.0375	-.3818	-.4453	-.2306	-.0516	.0907	.2421	.1654	-.1472	-.0675	-.1163	-.1077
270.000		.9473							.5295						

X/L*	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T47)

ALPHAT(4) = 4.040 BETAT (3) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0064	.1069	-.0130
30.000	-.0082	.1131	-.0195
60.000	-.0037	.1305	.0645
90.000	.0308	.1452	
120.000	.0897	.1629	.0443
135.000	.0802	.1489	-.0409
150.000	.0562	.0945	-.0029
165.000	.0779	.1254	-.1825
180.000	.0797	.1238	-.1895

ALPHAT(4) = 4.090 BETAT (4) = 4.180

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1870	1.0260	.6304	.1282	-.2410	-.3160	-.4056	-.3511	.1688	.0825	-.1135	-.2082	-.1558	.0083	.0269
30.000			.5551	.0549	-.2986	-.3728	-.4499	-.0450	.1512	.0922	-.1799	-.2041	-.1162	-.0012	.0146
60.000			.4824	-.0215	-.3501	-.4162	-.5041	-.0150	.2019	-.0505	-.2614	-.0991	-.0719	-.0206	-.0136
90.000		.8495	.4268	-.0604	-.3826	-.4494	-.2448	-.0420	.5834		-.6027	-.1272	-.1530	-.1119	-.0546
120.000			.3998	-.0739	-.4014	-.4635	-.2995	-.0675	.2337	-.1890	-.3301	-.0487	-.0567	-.1157	-.1136
135.000								-.0675		.1133		-.1751		-.1363	
150.000			.4073	-.0759	-.4005	-.4591	-.1727	-.0698	.0456	.2102	-.0862	-.2722	-.1523	-.2693	-.2036
165.000				-.0678	-.3883	-.4536	-.1431	-.0547	.0766	.2257	.0662	-.1504	-.0665	-.0982	-.1051
180.000	1.1870	.8731	.4386	-.0596	-.3823	-.4474	-.2882	-.0474	.1022	.2203	.1742	-.1680	-.0605	-.1117	-.1367
270.000		1.0450							.5116						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0221	.0829	-.0069
30.000	-.0281	.0981	-.0242
60.000	-.0358	.1016	.0332
90.000	.0180	.1174	
120.000	.0433	.0836	-.0702
135.000	.0272	.0664	-.1660
150.000	.0174	-.0064	-.1672
165.000	.0329	.0538	-.2227
180.000	.0415	.0547	-.3266

ARC11-716 IA14 O1+T12+S12+N25 EXTERNAL TANK (RB1T47)

ALPHAT(4) = 4.040 BETAT (5) = 8.360

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1310	.9758	.9980	.1068	-.2621	-.3370	-.4259	-.3529	.0816	-.0165	-.1403	-.2079	-.1775	-.0263	-.0287
30.000			.4661	-.0224	-.3556	-.4275	-.5046	-.0642	.1194	.0663	-.1740	-.2070	-.0947	.0132	-.0213
60.000			.3716	-.1130	-.4262	-.4781	-.1250	-.0831	.0198	.0208	-.2564	-.1331	-.0695	-.0254	-.0538
90.000		.7345	.3232	-.1363	-.4478	-.5018	-.1347	-.0987	.6312		-.5046	-.0611	-.1126	-.0970	-.0959
120.000			.3130	-.1615	-.4538	-.5078	-.1381	-.0996	.0897	-.1053	-.3037	-.0915	-.0996	-.1666	-.1911
135.000								-.0996		.0961		-.1992		-.1905	
150.000			.3344	-.1388	-.4452	-.4993	-.1158	-.0858	-.0034	.1314	-.1638	-.3536	-.2086	-.3212	-.2011
165.000				-.1146	-.4294	-.4850	-.1370	-.0793	.0748	.1810	.0307	-.1753	-.1119	-.1981	-.1914
180.000	1.1310	.7908	.4117	-.0824	-.4055	-.4676	-.3452	-.0547	.0454	.1878	.1304	-.1768	-.0952	-.2358	-.2002
270.000		1.1230							.4982						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0757	.0341	-.0824
30.000	-.0632	.0742	-.0601
60.000	-.0620	.0901	.0197
90.000	-.0192	.0926	
120.000	.0024	.0547	-.0958
135.000	-.0205	.0432	-.1939
150.000	-.0418	-.0475	-.2198
165.000	-.0216	.0103	-.2581
180.000	-.0457	-.0141	-.4180

ALPHAT(5) = 8.100 BETAT (1) = -8.310

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0920	1.0530	.7030	.2046	-.1797	-.2556	-.3516	-.2413	.0990	.0368	-.0797	-.1231	-.1273	-.0844	.0053
30.000			.8091	.3093	-.0940	-.1755	-.2715	.1242	.1943	-.0047	-.0518	-.0792	-.0380	-.0028	.0504
60.000			.8146	.3179	-.0869	-.1622	-.2795	.3005	.3964	-.1464	-.1265	-.1142	.0214	.0615	.0685
90.000		1.0730	.7089	.2215	-.1710	-.2483	-.1951	.3242	.4097		-.3681	-.2652	-.0269	.0552	.0498
120.000			.5458	.0666	-.2987	-.3707	-.4420	-.0298	-.0345	-.1955	-.3855	-.2686	.0316	.1194	.0800
135.000								-.1062		-.1277		-.2639		.1110	
150.000			.4257	-.0608	-.3906	-.4570	-.5510	-.0989	-.0881	.1799	-.1251	-.2293	-.0012	-.0133	.0031
165.000				-.1216	-.4394	-.5031	-.2584	-.1228	-.0248	.1934	.0817	-.0542	-.0144	-.0141	.0097
180.000	1.0920	.7458	.3138	-.1584	-.4641	-.5182	-.1419	-.1165	.0007	.1724	.0882	-.1063	-.0345	-.0307	-.0290
270.000		.6883							.4440						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 OL+T12+S12N25 EXTERNAL TANK (RB1T47)

ALPHAT(9) = 8.100 BETAT (1) = -8.310

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	-.0329	.0617	-.0286
30.000	.0386	.1324	.0172
60.000	.0876	.2014	.1040
90.000	.1148	.2107	
120.000	.1663	.2028	.1544
135.000	.1849	.2041	.1163
150.000	.1467	.1948	.2271
165.000	.1590	.1927	-.1155
180.000	.1222	.1491	-.1542

ALPHAT(9) = 8.180 BETAT (2) = -4.180

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1340	1.1100	.7414	.2406	-.1572	-.2325	-.3286	-.2765	.2132	.1273	-.0510	-.1005	-.0874	-.0498	.0415
30.000			.7694	.2701	-.1331	-.2116	-.3033	-.1610	.2643	.0851	-.0958	-.0576	-.0436	-.0306	.0474
60.000			.7156	.2208	-.1716	-.2438	-.3582	.1894	.4210	-.0892	-.1363	-.0301	-.0132	-.0068	.0239
90.000		.9790	.6022	.1168	-.2579	-.3294	-.4294	.2382	.4183		-.4361	-.1866	-.0672	-.0406	-.0219
120.000			.4748	-.0086	-.3534	-.4190	-.5097	-.0424	.0307	-.2138	-.4488	-.2931	.0181	.0591	.0143
135.000								-.0682		-.0625		-.2992		.0263	
150.000			.3941	-.0906	-.4137	-.4677	-.4863	-.0860	.0276	.1993	-.0661	-.2920	-.0393	-.0715	-.0569
165.000				-.1258	-.4392	-.4944	-.1382	-.1088	.0344	.1908	.0752	-.0861	-.0319	-.0467	-.0323
180.000	1.1340	.7512	.3311	-.1434	-.4443	-.4965	-.1174	-.0876	.0405	.1601	.1406	-.1209	-.0717	-.0594	-.0485
270.000		.7940							.4829						

X/LT	.7480	.8530	.9280
PHI			
.000	.0125	.1093	.0192
30.000	.0358	.1395	.0167
60.000	.0443	.1690	.0538
90.000	.0748	.1395	
120.000	.1278	.2633	.1475
135.000	.1380	.2469	.0776
150.000	.1205	.1729	.1684
165.000	.1355	.1875	-.1462
180.000	.1102	.1559	-.1613

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T47)

ALPHAT(5) = 8.200 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1580	1.1300	.7463	.2454	-.1490	-.2277	-.3244	-.2688	.2479	.1546	-.0391	-.1098	-.0460	-.0037	.0525
30.000			.7057	.2086	-.1802	-.2608	-.3498	-.2951	.2747	.1302	-.1042	-.1058	-.0525	-.0054	.0394
60.000			.6094	.1148	-.2540	-.3250	-.4323	.0740	.4225	-.0279	-.1575	-.0574	-.0229	.0045	.0134
90.000		.8908	.4952	.0111	-.3368	-.4070	-.4954	.0319	.4266		-.4257	-.0884	-.0371	-.0810	-.0355
120.000			.4033	-.0780	-.4063	-.4646	-.5414	-.1095	.1069	-.1839	-.4928	-.2171	-.0097	-.0108	-.0362
135.000								-.1000		.0197		-.3114		-.0382	
150.000			.3584	-.1150	-.4283	-.4881	-.4670	-.1084	.0506	.2320	-.0646	-.2603	-.0731	-.1201	-.0957
165.000				-.1373	-.4389	-.4920	-.1752	-.1144	.0429	.2195	.1262	-.1470	-.0561	-.0721	-.0401
180.000	1.1580	.7523	.3395	-.1533	-.4415	-.4966	-.1321	-.1068	.0470	.2135	.1665	-.1598	-.0735	-.0633	-.0349
270.000		.9000							.4323						

X/LT	.7480	.8530	.9280
PHI			
.000	.0272	.1238	.0384
30.000	.0229	.1297	.0106
60.000	.0108	.1343	.0256
90.000	.0516	.1139	
120.000	.1048	.1916	.0510
135.000	.0963	.1749	-.0359
150.000	.0742	.1211	.0106
165.000	.1039	.1506	-.1730
180.000	.1050	.1454	-.1824

ALPHAT(5) = 8.150 BETAT (4) = 4.230

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.194.	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1410	1.1110	.7321	.2335	-.1566	-.2345	-.3301	-.2759	.2088	.1194	-.0538	-.10.7	-.0915	-.0569	.0439
30.000			.6287	.1349	-.2368	-.3154	-.3995	-.3221	.2246	.1333	-.0980	-.1548	-.1343	-.0527	.0274
60.000			.5003	.0098	-.3334	-.3978	-.4999	.0026	.2775	.0405	-.1565	-.1677	-.0906	-.0031	.0333
90.000		.7952	.3947	-.0874	-.4110	-.4672	-.1696	-.0952	.4875		-.4363	-.3472	-.0049	-.0043	-.0484
120.000			.3353	-.1254	-.4409	-.4981	-.1980	- 1113	.1091	-.1004	-.4220	-.2155	-.0147	-.0300	-.0597
135.000								-.1034		.0936		-.2759		-.0631	
150.000			.3239	-.1592	-.4490	-.5018	-.1610	-.1040	.0217	.1948	-.0517	-.2830	-.1230	-.1535	-.1334
165.000				-.1492	-.4449	-.5008	-.1272	-.0954	.0410	.1919	.0797	-.1836	-.0766	-.0597	-.0415
180.000	1.1410	.7611	.3356	-.1575	-.4433	-.4992	-.1351	-.0950	.0434	.1837	.1473	-.1860	-.0730	-.0475	-.0615
270.000		1.0010							.4226						

X/LT	.7480	.8530	.9280
PHI			

ARC11-716 IA14 OL+T12+S12N25 EXTERNAL TANK (RB1T47)

ALPHAT(5) = 8.190 BETAT (4) = 4.230

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	.0093	.0989	.0201
30.000	-.0154	.1043	.0223
60.000	.0035	.1459	.1052
90.000	.0230	.1452	
120.000	.0714	.1141	-.0734
135.000	.0671	.1012	-.1486
150.000	.0565	.0273	-.1423
165.000	.0729	.0861	-.2107
180.000	.0726	.0852	-.3122

ALPHAT(5) = 8.100 BETAT (5) = 8.420

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.0840	1.0570	.6962	.2111	-.1773	-.2557	-.3529	-.2193	.0932	.0214	-.0761	-.1422	-.1328	-.0920	.0146
30.000			.5288	.0447	-.3083	-.3841	-.4639	-.3795	.1489	.0977	-.1185	-.1919	-.1921	-.1086	-.0180
60.000			.3801	-.0987	-.4184	-.4827	-.2422	-.1114	.2063	.0677	-.1679	-.1896	-.1352	-.0028	.0056
90.000		.6823	.2880	-.1698	-.4740	-.5211	-.1368	-.1505	.4895		-.4805	-.1607	-.0416	-.0500	-.1075
120.000			.2549	-.2040	-.4815	-.5328	-.1339	-.1064	-.0484	-.0498	-.3914	-.0905	-.0498	-.1014	-.0966
135.000								-.1096		.0530		-.1823		-.1180	
150.000			.2612	-.2045	-.4941	-.5117	-.1384	-.1119	-.0166	.0853	-.1345	-.3104	-.1574	-.1967	-.1362
165.000				-.1884	-.4761	-.5319	-.1467	-.1101	.0135	.1436	.0123	-.2079	-.0888	-.1182	-.1832
180.000	1.0840	.6933	.3100	-.1677	-.4689	-.5261	-.1467	-.0992	.0221	.1395	.0802	-.2012	-.0893	-.1543	-.1185
270.000		1.0800							.4219						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0374	.0718	-.0156
30.000	-.0804	.0790	-.0215
60.000	-.0165	.1360	.0005
90.000	-.0223	.1157	
120.000	.0431	.0947	-.0875
135.000	.0318	.0829	-.1698
150.000	-.0293	.0020	-.1858
165.000	.0306	.0474	-.2300
180.000	.0074	.0185	-.3903

ARC11-716 IA14 CR+718+SIZNES EXTERNAL TANK (RB1T48) (14 FEB 74)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES
LREF = 36.7090 INCHES YMRP = .0000 INCHES
BREF = 36.7090 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 1.100 ELEVON = .000
RUDDER = .000 SPOBRK = .000

ALPHAT(1) = -8.680 BETAT (1) = -8.260

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0090	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.1100	.7250	.3485	-.1026	-.3941	-.4529	-.1954	-.0939	.0300	.0350	-.1688	-.2875	-.1087	-.0807	-.0495
30.000			.4301	-.0349	-.3472	-.4148	-.4843	-.0492	-.0491	-.2423	-.3686	-.1734	-.1572	-.1478	-.0822
60.000			.5732	.0937	-.2423	-.3097	-.3981	.0169	-.0361	-.5214	-.6210	-.3188	-.1210	.0361	-.0406
90.000		1.1000	.7361	.2590	-.1229	-.1967	-.1964	.3945	.4655		-.4264	-.4060	-.1527	-.0754	-.0477
120.000			.8405	.3574	-.0394	-.1191	-.1493	.4292	.5135	.0901	.2308	.2344	.1139	.0028	-.0618
135.000								.3464		.3222		.2212		-.0019	
150.000			.8610	.3726	-.0224	-.0991	-.2160	.2835	.4043	.4969	.3972	.2081	-.0042	-.1379	-.1373
165.000				.3539	-.0561	-.1359	-.2357	.1902	.3608	.5136	.3927	.1878	-.0085	-.1655	-.1706
180.000	1.1100	1.1600	.7622	.2761	-.1079	-.1772	-.2609	.1040	.0377	.4953	.3283	.0999	-.0485	-.2020	-.2211
270.000		.7313							.4695						
X/LT	.7460	.8330	.9280												
PHI															
.000	-.0532	.0316	-.0434												
30.000	-.0799	-.0119	.0003												
60.000	-.0394	-.0136	.0487												
90.000	.0099	-.1497													
120.000	.0740	-.0392	.1964												
135.000	.0764	-.0100	.1154												
150.000	.0407	-.0575	.1574												
165.000	.0284	-.0335	-.0825												
180.000	-.0182	-.0352	-.1046												

ALPHAT(1) = -8.680 BETAT (2) = -4.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.1550	.7631	.3677	-.0975	-.3870	-.4383	-.3291	-.0800	.0500	.0808	-.1130	-.3045	-.1[illegible]	-.0043	-.0373
30.000			.4108	-.0523	-.3646	-.4255	-.4654	-.0740	.0110	-.1320	-.3013	-.1695	-.1[illegible]	-.0761	-.0794
60.000			.5040	.0257	-.2997	-.3621	-.4512	-.0773	.0238	-.4942	-.5921	-.2725	-.1[illegible]	[illegible].5	-.0307
90.000		1.0180	.6336	.1526	-.2067	-.2779	-.3669	.2533	.4556		-.4103	-.4350	-.1247	-.0671	-.0688
120.000			.7481	.2652	-.1188	-.1955	-.2884	.2632	.5343	.1454	.2360	.1653	.0426	-.0546	-.1412
135.000								.2272		.3577		.1543		-.0791	
150.000			.8082	.3147	-.0754	-.1516	-.2651	.1803	.4397	.4989	.2278	.1764	-.0810	-.2078	-.2182

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T48)

ALPHAT(1) = -8.660 BETAT (2) = -4.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6360
PHI															
165.000				.3131	-.0756	-.1563	-.2532	.0997	.4084	.5384	.3405	.1319	-.0753	-.1678	-.2117
180.000	1.1550	1.1770	.7847	.2858	-.0966	-.1715	-.2620	.0967	.3892	.5330	.3498	.0691	-.0752	-.1906	-.2218
270.000		.8276							.4747						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0403	.0515	-.0554
30.000	-.0530	.0201	.0012
60.000	-.0353	.0151	.0865
90.000	.0011	.0012	
120.000	.0136	-.0604	.0719
135.000	.0091	-.0554	-.0007
150.000	-.0207	-.1029	.0340
165.000	-.0046	-.0571	-.1660
180.000	-.0350	-.0569	-.1559

ALPHAT(1) = -8.610 BETAT (3) = .020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6360
PHI															
.000	1.1710	.7790	.3705	-.0908	-.3811	-.4375	-.4349	-.0910	.0551	.1022	-.0893	-.2971	-.0356	.0148	-.0178
30.000			.3843	-.0736	-.3742	-.4331	-.4922	-.0848	.0164	-.0254	-.2457	-.1940	-.0635	-.0444	-.0583
60.000			.4367	-.0378	-.3487	-.4050	-.4438	-.1187	.0816	-.1837	-.5636	-.2246	-.1790	-.0478	-.0349
90.000		.9271	.5321	.0513	-.2657	-.3490	-.3339	.0417	.4718		-.4074	-.4652	-.1275	-.0804	-.1025
120.000			.6458	.1643	-.1996	-.2756	-.3594	.1488	.5504	.2279	.1811	.0951	-.0093	-.1181	-.2081
135.000								.1553		.1777		.0827		-.1718	
150.000			.7382	.2448	-.1342	-.2088	-.3157	.1225	.4436	.0918	.1428	-.0267	-.1618	-.3026	-.2973
165.000				.2831	-.1025	-.1802	-.2771	-.0030	.4200	.5395	.2866	.0989	-.0268	-.1684	-.1852
180.000	1.1710	1.1780	.7868	.2891	-.0975	-.1722	-.2683	.0034	.4128	.5295	.3620	.0328	-.0433	-.1969	-.2040
270.000		.9239							.4546						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0476	.0578	-.0723
30.000	-.0646	.0535	-.0236
60.000	-.0363	.0574	.1325
90.000	-.0191	.0242	
120.000	-.0046	-.0458	-.0895
135.000	-.0230	-.0557	-.1569
150.000	-.0450	-.1339	-.1588

ARC11-716 (A14 OX+712+S12N25 EXTERNAL TANK (RB1T48)

ALPHAT(1) = -8.810 BETAT (3) = .020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
165.000	-.0175	-.0611	-.2118
180.000	-.0113	-.0652	-.1817

ALPHAT(1) = -8.630 BETAT (4) = 4.130

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.1530	.7619	.3718	-.0913	-.3843	-.4387	-.3088	-.0804	.0384	.0752	-.1147	-.2983	-.0635	-.0044	-.0245
30.000			.3565	-.1020	-.3885	-.4453	-.2491	-.0746	.0104	-.0257	-.2077	-.2592	-.0622	-.0294	-.0580
60.000			.3713	-.0900	-.3757	-.4326	-.1419	-.1007	.0123	-.1798	-.5584	-.2027	-.1423	-.0974	-.0612
90.000		.8256	.4287	-.0366	-.3429	-.4033	-.0445	-.0705	.5296		-.4122	-.4836	-.1564	-.0992	-.1303
120.000			.5348	.0630	-.2695	-.3412	-.3266	.0574	.5590	.2885	.1245	.0321	-.0529	-.1666	-.2470
135.000								.0750		.3758		.0008		-.2269	
150.000			.6480	.1701	-.1891	-.2634	-.3654	.0522	.4095	.4550	.0071	-.1636	-.2486	-.3944	-.3270
165.000				.2405	-.1296	-.2072	-.3037	-.0060	.3754	.4920	.2574	.0602	-.0294	-.1409	-.2135
180.000	1.1530	1.1700	.7760	.2824	-.0932	-.1737	-.2677	.0674	.3656	.4916	.3614	.0349	-.0469	-.2042	-.2620
270.000		1.0170							.4437						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0453	.0464	-.0552
30.000	-.0521	.0477	-.0553
60.000	-.0225	.0672	.1201
90.000	-.0671	-.0412	
120.000	-.0671	-.0668	-.1721
135.000	-.0918	-.0829	-.2410
150.000	-.1083	-.1716	-.2576
165.000	-.0758	-.0921	-.2617
180.000	-.0698	-.1045	-.3351

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T48)

ALPHAT(1) = -8.660 BETAT (5) = 8.330

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1010	.7140	.3362	-.1074	-.3555	-.4097	-.1325	-.0943	.0161	.0397	-.1745	-.2725	-.1134	-.0582	-.0514
30.000			.3085	-.1444	-.3658	-.4147	-.0987	-.0805	.0086	-.1302	-.2467	-.3141	-.1147	-.0595	-.0712
60.000			.3033	-.1448	-.3639	-.4020	-.1020	-.0977	-.1116	-.1262	-.5575	-.2000	-.1013	-.0898	-.0908
90.000		.7273	.3373	-.1076	-.3534	-.3296	-.0672	-.1800	.5690		4157	-.5004	-.1761	-.1090	-.1710
120.000			.4339	-.0256	-.2988	-.3628	-.2565	-.0297	.5633	.3171	.1012	-.0085	-.1094	-.2298	-.3039
135.000								-.0022		.3461		-.0514		-.3017	
150.000			.5613	.0901	-.2179	-.2820	-.4189	-.0310	.3571	.3491	-.0534	-.2425	-.3841	-.4891	-.3556
165.000				.2083	-.1376	-.2079	-.3383	-.0452	.2919	.4081	.2186	.0515	-.0433	-.2305	-.3170
180.000	1.1010	1.0920	.7548	.2764	-.0819	-.1550	-.2796	.0852	.2792	.4297	.3467	.0518	-.1015	-.2612	-.3395
270.000		1.0980							.4522						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0508	.0220	-.0456
30.000	-.0478	.0507	-.0575
60.000	-.0424	.0681	.1036
90.000	-.1733	-.2223	
120.000	-.1410	-.1153	-.2007
135.000	-.1721	-.1172	-.2664
150.000	-.1975	-.2032	-.2954
165.000	-.1643	-.1363	-.3179
180.000	-.1550	-.2022	-.4164

ALPHAT(2) = -4.450 BETAT (1) = -8.280

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1620	.8326	.4455	-.0308	-.3458	-.4039	-.4732	-.1159	.0498	.0223	-.1946	-.2478	-.1400	-.0573	-.0599
30.000			.5394	.0611	-.2745	-.3457	-.4206	-.1997	.0524	-.1759	-.3203	-.1364	-.1476	-.1368	-.0679
60.000			.6602	.1739	-.1859	-.2574	-.3579	.0939	.1267	-.4016	-.5285	-.2569	-.1072	.0410	-.0151
90.000		1.1490	.7650	.2743	-.1073	-.1836	-.2811	.3676	.5360		-.5591	-.4021	-.0909	-.0345	-.0319
120.000			.8016	.3154	-.0794	-.1583	-.2533	.2493	.4171	-.0689	.2014	.2346	.1196	.0084	-.0668
135.000								.1444		.1826		.2048		.0028	
150.000			.7765	.2821	-.1025	-.1781	-.2856	.0590	.2992	.3952	.2862	.1742	-.0158	-.1402	-.1303
165.000				.2282	-.1491	-.2215	-.3178	-.2058	.2611	.4393	.3385	.1561	-.0061	-.1737	-.1682
180.000	1.1620	1.0820	.6628	.1705	-.1852	-.2385	-.3388	-.1231	.2402	.4490	.2804	.0756	-.0491	-.2163	-.2210
270.000		.7809							.5426						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T48)

ALPHAT(2) = -4.450 BETAT (1) = -8.280

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0743	.0266	-.0469
30.000	-.0623	.0287	-.0175
60.000	-.0045	.1100	.0947
90.000	.0502	.0890	
120.000	.1036	.0922	.2306
135.000	.1101	.0953	.1643
150.000	.0680	.0713	.2324
165.000	.0613	.0875	-.0750
180.000	.0188	.0635	-.1018

ALPHAT(2) = -4.430 BETAT (2) = -4.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2110	.8715	.4679	-.0121	-.3301	-.3887	-.4600	-.0696	.0768	.0905	-.1218	-.2814	-.0653	.0218	-.0150
30.000			.5164	.0258	-.2987	-.3641	-.4337	-.2924	.1184	-.0575	-.2269	-.1897	-.1004	-.0525	-.0504
60.000			.5901	.0941	-.2479	-.3122	-.4081	.0383	.1857	-.3605	-.5077	-.1983	-.1714	.0009	.0055
90.000		1.0700	.6674	.1731	-.1897	-.2632	-.3541	.3214	.5429		-.5364	-.4369	-.0961	-.0331	-.0431
120.000			.7146	.2230	-.1535	-.2289	-.3197	.1523	.4546	.0058	.1484	.1551	.0521	-.0359	-.1246
135.000								.0500		.2518		.1356		-.0525	
150.000			.7300	.2306	-.1494	-.2200	-.3246	-.0719	.3445	.4199	.1414	.1569	-.0710	-.1846	-.1933
165.000				.2096	-.1607	-.2348	-.3283	-.2483	.3062	.4646	.2926	.1093	-.0757	-.1709	-.1860
180.000	1.2110	1.0990	.6843	.1815	-.1608	-.2520	-.3339	-.0783	.2696	.4598	.3055	.0434	-.0897	-.2027	-.2113
270.000		.8817							.5893						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0549	.0350	-.0431
30.000	-.0592	.0430	.0046
60.000	-.0285	.0809	.0891
90.000	-.0012	.0908	
120.000	.0232	.0316	.1324
135.000	.0260	.0255	.0736
150.000	-.0006	-.0140	.1350
165.000	.0134	.0180	-.1365
180.000	-.0106	.0083	-.1408

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T48)

ALPHAT(2) = -4.340 BETAT (3) = .020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0090	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2230	.8835	.4701	-.0007	-.3243	-.3869	-.4582	-.0635	.0392	.1174	-.0893	-.2601	-.0445	.0448	-.0004
30.000			.4793	.0037	-.3256	-.3855	-.4484	-.0945	.0830	.0366	-.1746	-.2746	-.0480	.0122	-.0328
60.000			.5128	.0195	-.2988	-.3600	-.4304	-.0228	.2402	-.3081	-.4825	-.1446	-.0850	-.0758	-.0265
90.000		.9756	.5530	.0705	-.2642	-.3328	-.4157	.0883	.5574		-.5134	-.4784	-.1193	-.0641	-.0794
120.000			.5172	.1259	-.2264	-.2968	-.3806	.0997	.4240	.0813	.0992	.0711	-.0018	-.1007	-.1829
135.000								.1021		.2938		.0490		-.1412	
150.000			.3643	.1655	-.1961	-.2656	-.3679	.0908	.2898	.3921	.0873	-.0603	-.1492	-.2697	-.2722
165.000				.1824	-.1822	-.2578	-.3470	-.0385	.2884	.4332	.2407	.0668	-.0444	-.1758	-.2022
180.000	1.2230	1.0960	.5846	.1918	-.1815	-.2521	-.3414	-.0011	.2619	.4285	.3192	.0053	-.0528	-.1987	-.1999
270.000		.9756							.5512						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0556	.0582	-.0395
30.000	-.0681	.0533	-.0276
60.000	-.0395	.0803	.1035
90.000	-.0223	.0727	
120.000	.0084	.0123	-.0152
135.000	-.0035	.0015	-.0937
150.000	-.0327	-.0654	-.0902
165.000	-.0084	-.0116	-.1567
180.000	-.0104	-.0085	-.1509

ALPHAT(2) = -4.340 BETAT (4) = 4.150

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2030	.8686	.4659	-.0089	-.3220	-.3875	-.4573	-.0834	.0792	.0837	-.1201	-.2768	-.0816	.0232	-.0123
30.000			.4383	-.0369	-.3433	-.4026	-.4652	-.0449	.0365	.0563	-.1592	-.3129	-.0559	.0102	-.0190
60.000			.4331	-.0415	-.3420	-.3980	-.4717	-.0499	.1625	-.2353	-.4633	-.1236	-.0514	-.0533	-.0754
90.000		.8762	.4598	-.0119	-.3216	-.3840	-.1026	-.0163	.6017		-.4883	-.4971	-.1699	-.1007	-.1057
120.000			.5140	.0359	-.2899	-.3534	-.0575	.0424	.2101	.1788	.0485	.0136	-.0468	-.1525	-.2161
135.000								.0560		.2800		-.0250		-.2057	
150.000			.5868	.0958	-.2441	-.3114	-.4033	.0463	.2381	.3471	-.0330	-.1845	-.2344	-.3729	-.3065
165.000				.1475	-.2078	-.2790	-.3690	.0433	.2578	.4047	.2106	.0188	-.0444	-.1222	-.2013
180.000	1.2030	1.0920	.6749	.1766	-.1848	-.2547	-.3435	-.0091	.2554	.4017	.3181	-.0908	-.0550	-.1741	-.2337
270.000		1.0670							.5302						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T48)

ALPHAT(2) = -4.340 BETAT (4) = 4.150

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9290
PHI			
.000	-.0572	.0320	-.0409
30.000	-.0339	.0500	-.0367
60.000	-.0414	.0633	.0874
90.000	-.0403	.0261	
120.000	-.0412	-.0194	-.1271
135.000	-.0645	-.0334	-.2042
150.000	-.0754	-.1056	-.2219
165.000	-.0544	-.0367	-.2378
180.000	-.0492	-.0368	-.3266

ALPHAT(2) = -4.350 BETAT (5) = 8.270

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1560	.8200	.4349	-.0345	-.3433	-.4040	-.4737	-.0957	.0293	-.0013	-.1948	-.2391	-.1415	-.0504	-.0840
30.000			.3768	-.0812	-.3735	-.4342	-.4770	-.0659	.0088	-.0463	-.2230	-.2828	-.0768	-.0111	-.0223
60.000			.3594	-.0971	-.3814	-.4352	-.1541	-.0758	.0507	-.1656	-.4226	-.1481	-.0608	-.0420	-.0620
90.000		.7772	.3714	-.0801	-.3752	-.4320	-.0720	-.0687	.4850		-.4572	-.3472	-.1796	-.1189	-.1365
120.000			.4246	-.0379	-.3498	-.4114	-.0205	-.0111	.1071	.1738	.0412	-.0361	-.1269	-.2279	-.2505
135.000								-.0184		.3037		-.0873		-.2971	
150.000			.5063	.0286	-.2955	-.3626	-.2165	-.0258	.1875	.3030	-.0487	-.2673	-.3825	-.4782	-.3056
165.000				.1022	-.2401	-.3109	-.4025	-.0013	.1993	.3309	.1649	-.0001	-.0702	-.2427	-.2917
180.000	1.1560	1.0030	.6537	.1609	-.1944	-.2665	-.3576	-.0538	.1927	.3420	.2966	.0144	-.1118	-.2781	-.3296
270.000		1.1490							.5271						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0743	.0244	-.0535
30.000	-.0534	.0563	-.0419
60.000	-.0627	.0630	.0764
90.000	-.1159	-.0670	
120.000	-.0902	-.0598	-.1733
135.000	-.1176	-.0499	-.2318
150.000	-.1354	-.1331	-.2522
165.000	-.1180	-.0674	-.2857
180.000	-.1191	-.1004	-.3742

ARC11-716 IA14 OI+T12+S12N25 EXTERNAL TANK (RB1T48)

ALPHAT(3) = -.640 BETAT (1) = -8.320

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1770	.9150	.5343	.0486	-.2831	-.3422	-.4232	-.3788	.0961	.0447	-.1563	-.1879	-.1787	-.0824	-.0675
30.000			.6354	.1511	-.2058	-.2780	-.3587	-.1851	.1042	-.0961	-.2552	-.1096	-.1020	-.1242	-.0769
60.000			.7307	.2406	-.1323	-.2049	-.3104	.1534	.2484	-.2969	-.3409	-.1394	-.1345	.0119	.0002
90.000		1.1650	.7782	.2836	-.0974	-.1758	-.2729	.3720	.5584		-.3206	-.4195	-.1691	-.0525	-.0179
120.000			.7523	.2651	-.1188	-.1958	-.2874	.1685	.3129	-.2014	-.1116	.2521	.1788	.0493	-.0211
135.000								.0368		.0022		.1616		.0284	
150.000			.6889	.2017	-.1680	-.2404	-.3448	-.0678	.1922	.2918	.2337	.1102	.0295	-.1100	-.0859
165.000				.1321	-.2220	-.2887	-.3773	-.2920	.1682	.3622	.2757	.1354	.0334	-.1441	-.1093
180.000	1.1770	1.0020	.5681	.0791	-.2554	-.3202	-.3940	-.0806	.1571	.3706	.2359	.0430	-.0371	-.1912	-.1626
270.000		.7922							.6766						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0544	.0266	-.0546
30.000	-.0321	.0744	-.0241
60.000	.0207	.1708	.1010
90.000	.0505	.1623	
120.000	.0817	.2336	.2638
135.000	.0938	.2197	.1890
150.000	.0715	.1710	.2564
165.000	.0781	.1747	-.0515
180.000	.0487	.1284	-.0935

ALPHAT(3) = -.620 BETAT (2) = -4.140

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2290	.9629	.5586	.0573	-.2675	-.3344	-.4123	-.3652	.1399	.1167	-.0997	-.2271	-.1220	.0195	.0011
30.000			.6042	.1060	-.2364	-.3080	-.3857	-.3227	.1518	.0110	-.1803	-.1614	-.0684	-.0225	-.0285
60.000			.6551	.1530	-.2034	-.2701	-.3685	.0467	.2908	-.2499	-.3732	-.1073	-.0506	-.0687	.0129
90.000		1.0850	.6766	.1793	-.1871	-.2581	-.3465	.2304	.5721		-.5152	-.4914	-.1681	-.0617	-.0203
120.000			.6671	.1778	-.1932	-.2642	-.3483	.0825	.3659	-.1334	-.1144	.1339	.1043	.0017	-.0809
135.000								-.0229		.1291		.0479		-.0228	
150.000			.6463	.1443	-.2124	-.2805	-.3766	-.1308	.2415	.3452	.0884	.0608	.0003	-.1454	-.1413
165.000				.1147	-.2359	-.3030	-.3902	-.1948	.2133	.3839	.2419	.0355	-.0290	-.1424	-.1301
180.000	1.2290	1.0150	.5892	.0844	-.2494	-.3193	-.3964	-.0416	.1952	.3602	.2613	-.0212	-.0357	-.1688	-.1725
270.000		.8978							.6223						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T48)

ALPHAT(3) = -.620 BETAT (2) = -4.140

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0503	.0313	-.0301
30.000	-.0525	.0525	-.0033
60.000	-.0138	.1167	.0730
90.000	.0049	.1379	
120.000	.0213	.1458	.1914
135.000	.0282	.1296	.1220
150.000	.0099	.0922	.1973
165.000	.0291	.1086	-.1157
180.000	.0119	.0862	-.1230

ALPHAT(3) = -.610 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2430	.9778	.5636	.0613	-.2664	-.3337	-.4122	-.3610	.1429	.1382	-.0736	-.2095	-.0903	.0399	.0173
30.000			.5657	.0585	-.2672	-.3378	-.4076	-.3044	.1254	.0945	-.1396	-.2316	-.0493	.0200	.0014
60.000			.5671	.0616	-.2629	-.3284	-.4175	.0015	.3479	-.1938	-.3372	-.1363	-.0017	.0030	-.0101
90.000		.9930	.5731	.0728	-.2605	-.3256	-.4076	.0976	.5904		-.5529	-.3253	-.0998	-.0741	-.0601
120.000			.5811	.0795	-.2572	-.3240	-.4026	.0529	.3969	-.0592	-.0900	.0744	.0418	-.0627	-.1470
135.000								.0434		.1990		-.0038		-.0946	
150.000			.5930	.0871	-.2518	-.3190	-.4084	.0397	.1874	.3383	.0082	-.0541	-.0817	-.2117	-.2292
165.000				.0898	-.2476	-.3171	-.3989	.0362	.2025	.3314	.2028	.0046	-.0168	-.1404	-.1673
180.000	1.2430	1.0130	.5956	.0849	-.2494	-.3168	-.3976	-.0115	.1902	.3230	.2696	-.0248	-.0254	-.1098	-.1295
270.000		.9979							.5920						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0469	.0351	-.0101
30.000	-.0510	.0470	.0025
60.000	-.0431	.0877	.0611
90.000	-.0153	.1098	
120.000	.0192	.0854	.0646
135.000	.0100	.0769	-.0239
150.000	-.0194	.0218	-.0215
165.000	.0072	.0600	-.1378
180.000	.0116	.0635	-.1423

ARC11-716 IA14 01+T12+S12N25 EXTERNAL TANK (RB1T48)

ALPHAT(3) = -.610 BETAT (4) = 4.140

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2240	.9541	.5533	.0552	-.2661	-.3352	-.4132	-.3640	.1421	.1139	-.0993	-.2212	-.1380	.0204	.0051
30.000			.5051	.0185	-.3030	-.3682	-.4353	-.0621	.0965	.0746	-.1347	-.2735	-.0850	.0126	-.0042
60.000			.4784	.0009	-.3203	-.3745	-.4542	-.0171	.3439	-.1303	-.3289	-.1516	-.0495	.0009	-.0225
90.000		.8892	.4683	.0014	-.3197	-.3824	-.4399	.0056	.6272		-.5491	-.1081	-.0956	-.0537	-.0895
120.000			.4856	.0120	-.3151	-.3761	-.3903	.0111	.2142	.0327	-.0824	.0111	-.0230	-.1142	-.1810
135.000								.0169		.2128		-.0810		-.1498	
150.000			.5254	.0330	-.2886	-.3494	-.4328	.0208	.1417	.2445	-.0882	-.2063	-.1592	-.3203	-.2759
165.000				.0637	-.2647	-.3343	-.4199	.0184	.1827	.3043	.1593	-.0345	-.0360	-.0970	-.1683
180.000	1.2240	1.0170	.5866	.0885	-.2501	-.3198	-.4022	.0076	.1890	.3143	.2741	-.0479	-.0405	-.1335	-.1847
270.000		1.0900							.5678						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0532	.0316	-.0310
30.000	-.0378	.0639	-.0157
60.000	-.0389	.0812	.0890
90.000	-.0274	.0804	
120.000	-.0177	.0326	-.0694
135.000	-.0376	.0236	-.1589
150.000	-.0437	-.0395	-.1768
165.000	-.0281	.0168	-.2079
180.000	-.0252	.0229	-.3009

ALPHAT(3) = -.620 BETAT (5) = 8.290

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1720	.9059	.5225	.0428	-.2879	-.3520	-.4333	-.3790	.0815	.0233	-.1640	-.1918	-.1988	-.0903	-.0670
30.000			.4332	-.0318	-.3466	-.4097	-.4717	-.0452	.0673	-.0411	-.2090	-.2864	-.1096	-.0192	-.0176
60.000			.3936	-.0659	-.3698	-.4228	-.4839	-.0689	.1382	-.0728	-.2859	-.1763	-.0809	-.0342	-.0284
90.000		.7894	.3768	-.0842	-.3750	-.4304	-.1339	-.0644	.6647		-.4777	-.0807	-.0841	-.0804	-.1396
120.000			.3961	-.0580	-.3652	-.4225	-.0786	-.0435	.0506	.1052	-.1031	-.0644	-.0947	-.1889	-.2223
135.000								-.0279		.0938		-.1256		-.2334	
150.000			.4496	-.0249	-.3399	-.3979	-.0627	-.0203	.1209	.2723	-.0971	-.2917	-.2844	-.3917	-.2829
165.000				.0234	-.3019	-.3653	-.4387	-.0180	.1511	.2645	.1146	-.0591	-.0758	-.2130	-.2570
180.000	1.1720	.9202	.5630	.0731	-.2666	-.3332	-.4177	.0144	.1365	.2699	.2322	-.0356	-.0917	-.2787	-.2677
270.000		1.1690							.5590						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25 EXTERNAL TANK (RB1T48)

ALPHAT(3) = -.620 BETAT (5) = 8.290

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0824	.0212	-.0605
30.000	-.0901	.0478	-.0382
60.000	-.0814	.0707	.1004
90.000	-.1154	.0125	
120.000	-.0553	.0089	-.1145
135.000	-.0792	.0074	-.1863
150.000	-.0870	-.0513	-.2209
165.000	-.0752	-.0248	-.2491
180.000	-.0874	-.0434	-.3719

ALPHAT(4) = 4.080 BETAT (1) = -8.450

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1630	1.0110	.6433	.1558	-.2010	-.2745	-.3567	-.3114	.1406	.0619	-.0879	-.1467	-.1346	-.0832	-.0519
30.000			.7510	.2589	-.1182	-.1971	-.2832	-.1298	.1714	-.0137	-.0960	-.1081	-.0574	-.0425	-.0344
60.000			.8029	.3104	-.0755	-.1508	-.2614	.2215	.3646	-.1749	-.1905	-.1053	.0377	.0435	.0156
90.000		1.1510	.7727	.2826	-.1020	-.1766	-.2769	.3528	.5270		-.3643	-.2270	-.1352	-.1689	-.0867
120.000			.6726	.1890	-.1770	-.2502	-.3408	.0770	.1582	-.3382	-.4193	-.2195	.2439	.1620	.0602
135.000								-.0560		-.2142		-.1222		.1155	
150.000			.5775	.0926	-.2511	-.3174	-.4167	-.1296	.0760	.2192	.0883	-.1301	.0938	-.0355	-.0366
165.000				.0222	-.3081	-.3694	-.4521	-.1471	.0703	.3093	.1861	.0174	.0202	-.0584	-.0383
180.000	1.1630	.8902	.4572	-.0223	-.3309	-.3926	-.4620	-.0802	.1001	.2937	.1849	-.0228	-.0288	-.1118	-.1017
270.000		.7751							.6600						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0335	.0172	-.0766
30.000	.0082	.1001	-.0345
60.000	.0482	.1781	.0693
90.000	.0498	.0741	
120.000	.1378	.3175	.2997
135.000	.1469	.3036	.2238
150.000	.1204	.2255	.3068
165.000	.1295	.2167	-.0365
180.000	.0949	.1631	-.0946

ARC11-T16 IA14 01+T12+S12N25 EXTERNAL TANK (RB1T48)

ALPHAT(4) = 4.090 BETAT (2) = -4.150

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2190	1.0690	.6735	.1732	-.1891	-.2578	-.3445	-.2979	.2047	.1536	-.0423	-.1468	-.1095	-.0077	.0310
30.000			.7112	.2115	-.1580	-.2335	-.3172	-.2703	.2271	.0873	-.0853	-.1325	-.0656	.0130	.0342
60.000			.7129	.2128	-.1558	-.2255	-.3297	.0901	.3904	-.1216	-.1857	-.1519	.0119	.0421	.0399
90.000		1.0700	.6712	.1742	-.1882	-.2614	-.3521	.2085	.5417		-.4287	-.2412	.0391	-.0223	-.0219
120.000			.5960	.1062	-.2423	-.3112	-.3929	.0150	.2302	-.2778	-.3686	-.1943	.1260	.0971	-.0084
135.000								-.0467		-.0560		-.1820		.0651	
150.000			.5401	.0460	-.2832	-.3478	-.4398	-.0537	.1290	.2609	.0941	-.1766	.0067	-.0471	-.0782
165.000				.0111	-.3101	-.3717	-.4534	-.0366	.0966	.2908	.1949	.0051	-.0080	-.0091	-.0675
180.000	1.2190	.9044	.4755	-.0108	-.3204	-.3846	-.4084	-.0243	.0912	.2346	.2312	-.0348	-.0774	.0036	-.0729
270.000		.8854							.5969						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0189	.0270	.0323
30.000	-.0047	.0659	.0340
60.000	.0130	.1270	.0966
90.000	.0137	.1447	
120.000	.0564	.2321	.1859
135.000	.0717	.2179	.1186
150.000	.0614	.1592	.1961
165.000	.0809	.1677	-.0987
180.000	.0640	.1362	-.1163

ALPHAT(4) = 4.120 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2340	1.0790	.6766	.1781	-.1868	-.2591	-.3474	-.2956	.2164	.1780	-.0286	-.1321	-.0782	.0239	.0439
30.000			.6631	.1610	-.1993	-.2735	-.3539	-.3052	.1990	.1398	-.0996	-.1371	-.0586	.0208	.0340
60.000			.6233	.1186	-.2278	-.2977	-.3898	.0486	.3587	-.0668	-.1747	-.0860	-.0134	.0174	.0174
90.000		.9808	.5665	.0720	-.2507	-.3324	-.4114	.0768	.5603		-.4957	-.2070	-.0248	-.0631	-.0531
120.000			.5196	.0318	-.2957	-.3609	-.4359	.0038	.2902	-.2243	-.3434	-.1045	.0706	.0074	-.0751
135.000								-.0037		.0407		-.2064		-.0148	
150.000			.4962	.0134	-.3168	-.3754	-.4557	-.0270	.0920	.2526	.0306	-.1638	-.0200	-.1130	-.1513
165.000				.0100	-.3209	-.3927	-.3700	-.0251	.0960	.2410	.2035	-.0523	.0051	-.0514	-.0845
180.000	1.2340	.9030	.4839	.0079	-.3188	-.3860	-.4164	-.0136	.1052	.2384	.2390	-.0551	-.0136	-.0534	-.0841
270.000		.9799							.5636						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T48)

ALPHAT(4) = 4.120 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0085	.0113	.0282
30.000	-.0131	.0355	.0256
60.000	-.0133	.0907	.0997
90.000	-.0023	.1106	
120.000	.0475	.1553	.0777
135.000	.0410	.1463	-.0025
150.000	.0157	.0946	.0258
165.000	.0474	.1290	-.1352
180.000	.0513	.1213	-.1436

ALPHAT(4) = 4.110 BETAT (4) = 4.170

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.2180	1.0600	.6628	.1681	-.1895	-.2610	-.3453	-.2993	.2015	.1446	-.0447	-.1457	-.1197	-.0026	.0351
30.000			.5895	.0991	-.2410	-.3149	-.3879	-.2433	.1758	.1403	-.1081	-.1549	-.0900	-.0032	.0224
60.000			.5197	.0304	-.2880	-.3503	-.4367	.0184	.2155	.0077	-.2028	-.0370	-.0449	-.0132	-.0056
90.000		.8847	.4682	-.0044	-.3206	-.3833	-.4601	-.0110	.6073		-.5320	-.0807	-.1068	-.1067	-.0566
120.000			.4396	-.0300	-.3411	-.3997	-.4677	-.0278	.2505	-.1378	-.2798	-.0182	-.0050	-.0624	-.1132
135.000								-.0382		.1580		-.1638		-.0784	
150.000			.4496	-.0355	-.3441	-.3977	-.4382	-.0410	.0706	.2515	-.0119	-.2342	-.0913	-.2016	-.2186
165.000				-.0164	-.3369	-.3953	-.4005	-.0243	.0986	.2549	.1217	-.1026	-.0311	-.0365	-.0892
180.000	1.2180	.9062	.4762	-.0114	-.3260	-.3859	-.4604	-.0185	.1228	.2478	.2193	-.0964	-.0114	-.0443	-.1158
270.000		1.0750							.5457						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0181	.0253	.0392
30.000	-.0216	.0598	.0213
60.000	-.0304	.0849	.0721
90.000	.0089	.1048	
120.000	.0248	.0858	-.0325
135.000	.0095	.0719	-.1284
150.000	-.0018	.0078	-.1329
165.000	.0110	.0624	-.1834
180.000	.0147	.0685	-.2787

ARC11-716 IA14 OL+T12+S12N25 EXTERNAL TANK (RB1T48)

ALPHAT(4) = 4.110 BETAT (5) = 8.360

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1640	1.0150	.6406	.1607	-.1993	-.2717	-.3599	-.3109	.1290	.0505	-.0849	-.1538	-.1666	-.0817	-.0437
30.000			.5121	.0380	-.2903	-.3575	-.4299	-.0798	.1497	.1210	-.1143	-.1743	-.1279	-.0451	-.0191
60.000			.4137	-.0450	-.3537	-.4086	-.1778	-.0484	.0456	.0880	-.1866	-.0865	-.1007	-.0542	-.0437
90.000		.7790	.3728	-.0794	-.3770	-.4293	-.1447	-.0673	.6380		-.4576	-.0187	-.0940	-.1164	-.0930
120.000			.3619	-.0901	-.3833	-.4369	-.1569	-.0658	.1008	-.0603	-.2571	-.0801	-.0785	-.1368	-.1571
135.000								-.0702		.1406		-.1877		-.1560	
150.000			.3834	-.0818	-.3755	-.4290	-.1022	-.0628	.0238	.1545	-.1058	-.3499	-.1836	-.2755	-.2120
165.000				-.0566	-.3637	-.4201	-.1716	-.0517	.1044	.2098	.0909	-.1263	-.0734	-.1642	-.1880
180.000	1.1640	.8261	.4574	-.0278	-.3413	-.4022	-.4749	-.0314	.0919	.2223	.1824	-.1221	-.0552	-.2049	-.2085
270.000		1.1580							.5394						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0246	.0123	-.0485
30.000	-.0068	.0342	-.0175
60.000	-.0170	.0717	.0628
90.000	-.0105	.0821	
120.000	-.0044	.0548	-.0632
135.000	-.0284	.0474	-.1573
150.000	-.0534	-.0328	-.1931
165.000	-.0302	.0094	-.2258
180.000	-.0479	-.0034	-.3683

ALPHAT(5) = 8.250 BETAT (1) = -4.150

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1690	1.1470	.7762	.2788	-.1036	-.1801	-.2731	-.2237	.2492	.1900	.0131	-.0476	-.0414	-.0196	.0384
30.000			.6029	.3077	-.0803	-.1624	-.2519	-.2002	.2978	.1495	-.0490	-.0084	-.0056	.0173	.0490
60.000			.7504	.2589	-.1192	-.1936	-.2981	.1559	.4588	-.0226	-.0853	.0209	.0291	.0313	.0401
90.000		1.0190	.6391	.1600	-.2033	-.2753	-.3675	.2044	.4629		-.3771	-.1329	-.0122	.0032	.0027
120.000			.5121	.0393	-.2980	-.3908	-.4416	-.0405	.0844	-.1561	-.3837	-.2416	.0535	.1062	.0447
135.000								-.0345		-.0638		-.2595		.0749	
150.000			.4356	-.0387	-.3516	-.4104	-.4017	-.0587	.0501	.2176	-.0223	-.2416	.0074	-.0229	-.0367
165.000				-.0683	-.3774	-.4320	-.0966	-.0756	.0434	.1933	.1316	-.0274	.0130	.0030	-.0138
180.000	1.1690	.7929	.3755	-.0945	-.3806	-.4375	-.0709	-.0565	.0445	.1799	.1905	-.0446	-.0187	-.0130	-.0395
270.000		.8339							.5200						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T48)

ALPHAT(5) = 8.290 BETAT (1) = -4.150

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	.0803	.0639	.0557
30.000	.0386	.1100	.0492
60.000	.0438	.1483	.0806
90.000	.0574	.1308	
120.000	.0982	.2668	.1930
135.000	.1114	.2547	.1254
150.000	.0918	.1849	.2031
165.000	.1122	.1943	-.0947
180.000	.0935	.1624	-.1128

ALPHAT(5) = 8.290 BETAT (2) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.1880	1.1620	.7801	.2825	-.0986	-.1764	-.2697	-.2231	.2654	.2168	.0316	-.0467	.0143	.0328	.0545
30.000			.7392	.2466	-.1292	-.2095	-.2961	-.2497	.2852	.1926	-.0379	-.0392	.0065	.0311	.0476
60.000			.6454	.1568	-.2000	-.2681	-.3726	.0591	.4306	.0336	-.0940	.0141	.0292	.0400	.0275
90.000		.9263	.5343	.0559	-.2849	-.3480	-.4344	.0340	.4688		-.3584	-.0366	.0115	-.0202	-.0184
120.000			.4409	-.0262	-.3481	-.4078	-.4792	-.0785	.1354	-.1196	-.4229	-.1674	.0404	.0392	-.0128
135.000								-.0646		.0519		-.2584		.0111	
150.000			.4015	-.0620	-.3676	-.4260	-.4932	-.0640	.0422	.2603	-.0061	-.2090	-.0183	-.0746	-.0780
165.000				-.0827	-.3838	-.4321	-.1527	-.0942	.0489	.2259	.1894	-.0596	.0009	-.0167	-.0201
180.000	1.1880	.7918	.3792	-.0951	-.3807	-.4358	-.1973	-.0797	.0582	.2285	.2188	-.0731	-.0189	-.0137	-.0158
270.000		.9337							.4736						

X/LT	.7480	.8530	.9280
PHI			
.000	.0338	.0307	.0756
30.000	.0300	.0560	.0485
60.000	.0149	.0851	.0585
90.000	.0388	.0913	
120.000	.0758	.1875	.0832
135.000	.0688	.1741	.0041
150.000	.0431	.1223	.0372
165.000	.0810	.1555	-.1197
180.000	.0835	.1905	-.1340

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T48)

ALPHAT(3) = 0.240 BETAT (3) = 4.220

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1700	1.1410	.7631	.2733	-.1057	-.1816	-.2774	-.2264	.2448	.1789	.0091	-.0497	-.0430	-.0898	.0380
30.000			.6984	.1779	-.1815	-.2577	-.3434	-.3006	.2417	.1909	-.0336	-.1028	-.0884	-.0488	.0186
60.000			.5350	.0585	-.2751	-.3386	-.4317	.0297	.2618	.1103	-.0878	-.1087	-.0535	.0002	.0278
90.000		.8298	.4340	-.0330	-.3468	-.4086	-.3816	-.0624	.5145		-.3816	-.3263	.0177	.0127	-.0349
120.000			.3741	-.0832	-.3809	-.4338	-.4560	-.0746	.1356	-.0546	-.3603	-.1726	.0250	.0020	-.0528
135.000								-.0711		.1362		-.2503		-.0203	
150.000			.3631	-.1030	-.3914	-.4395	-.1740	-.0847	.0484	.2323	.0102	-.2447	-.0787	-.1044	-.1486
165.000				-.0991	-.3918	-.4393	-.1106	-.0722	.0517	.2246	.1349	-.1260	-.0431	-.0187	-.0245
180.000	1.1700	.7958	.3735	-.0971	-.3881	-.4395	-.1398	-.0599	.0564	.2225	.1937	-.1166	-.0340	.0032	-.0470
270.000		1.0310							.4614						

X/LT	.7480	.8330	.9280
PHI			
.000	.0163	.0576	.0547
30.000	-.0034	.0555	.0608
60.000	.0115	.1202	.1446
90.000	.0077	.1370	
120.000	.0552	.1199	-.0397
135.000	.0491	.1065	-.1167
150.000	.0362	.0446	-.1133
165.000	.0905	.0961	-.1722
180.000	.0513	.0935	-.2715

ALPHAT(3) = 0.180 BETAT (4) = 0.410

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1140	1.0890	.7345	.2591	-.1183	-.1965	-.2873	-.2378	.1134	.0868	-.0350	-.0827	-.1088	-.0761	-.0631
30.000			.5705	.1010	-.2403	-.3172	-.3919	-.3544	.1765	.1684	-.0617	-.1336	-.1614	-.1219	-.0528
60.000			.4259	-.0359	-.3450	-.4365	-.4933	-.1070	.2825	.1442	-.0915	-.1329	-.1105	-.0545	-.0090
90.000		.7232	.3359	-.1033	-.3991	-.4540	-.1152	-.1226	.5521		-.4330	-.2234	-.0348	-.0495	-.0946
120.000			.3011	-.1385	-.4119	-.4592	-.1175	-.0815	-.0187	.0070	-.3672	-.0881	-.0290	-.0789	-.1058
135.000								-.0871		.1108		-.1906		-.0935	
150.000			.3092	-.1407	-.4145	-.4559	-.1102	-.0869	.0100	.1258	-.0649	-.3219	-.1417	-.1765	-.1501
165.000				-.1240	-.4073	-.4614	-.1243	-.0871	.0511	.1869	.0624	-.1631	-.0827	-.1000	-.1277
180.000	1.1140	.7201	.3553	-.1098	-.3978	-.4553	-.1776	-.0568	.0754	.1780	.1265	-.1419	-.0686	-.1452	-.1192
270.000		1.1110							.4644						

X/LT	.7460	.8330	.9280
PHI			

ARC11-716 IA14 OH+T12+S12WE5 EXTERNAL TANK (RB1T48)

ALPHAT(3) = 8.180 BETAT (4) = 8.410

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

XI/LT	.7480	.8530	.9200
PHI			
.000	-.0163	.0353	.3030
30.000	.0023	.0380	.0151
60.000	.0435	.0901	.1175
90.000	-.0140	.1016	
120.000	.0376	.0944	-.3483
135.000	.0180	.0855	-.1348
150.000	-.0116	.0121	-.1556
165.000	.0214	.0456	-.1950
180.000	-.0018	.0184	-.3483

ARC11-716 IA14 01+T12+S12N25 EXTERNAL TANK (RB1T49) (14 FEB 74)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES
LREF = 38.7090 INCHES YMRP = .0000 INCHES
BREF = 38.7090 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 1.150 ELEVON = .000
RUDDER = .000 SPOBRK = .000

ALPHAT(1) = -8.570 BETAT (1) = -3.230

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1310	.7461	.3654	-.0801	-.3669	-.4189	-.4800	-.1064	-.0039	.0576	-.1403	-.2742	-.0929	-.0233	-.0201
30.000			.4497	-.0055	-.3132	-.3762	-.4480	-.3355	-.0612	-.2302	-.3598	-.1780	-.1322	-.1176	-.0363
60.000			.5950	.1269	-.2068	-.2719	-.3665	-.0232	-.0265	-.5039	-.5949	-.3453	-.1576	.0549	.0068
90.000		1.1270	.7597	.2837	-.0842	-.1579	-.2536	.3413	.4892		-.4087	-.3425	-.2071	-.0617	-.0028
120.000			.8658	.3846	-.0035	-.0818	-.1757	.2868	.5153	.0963	.3258	.2681	.1495	.0389	-.0457
135.000								-.0220		.3269		.2534		.0401	
150.000			.8832	.3965	.0076	-.0667	-.1787	-.0895	.3981	.5040	.3915	.2421	.0325	-.0955	-.1135
165.000				.3559	-.0276	-.1034	-.2008	-.1484	.3416	.5261	.4123	.2176	.0302	-.1221	-.1504
180.000	1.1310	1.1830	.7772	.2959	-.0681	-.1454	-.2271	-.1755	.2965	.5096	.3511	.1467	-.0269	-.1402	-.1802
270.000		.7467							.5450						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0556	-.0083	-.0248
30.000	-.0832	-.0417	.0249
60.000	-.0372	-.0325	.0735
90.000	-.0175	-.0886	
120.000	-.0297	.0082	.2212
135.000	.0167	.0263	.1482
150.000	.0029	-.0260	.1934
165.000	-.0138	.0022	-.0406
180.000	-.0207	-.0063	-.0779

ALPHAT(1) = -8.550 BETAT (2) = -4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1760	.7827	.3901	-.0653	-.3487	-.3970	-.4589	-.1816	-.0062	.0674	-.0934	-.2936	-.1031	.0226	.0262
30.000			.4355	-.0214	-.3238	-.3801	-.4451	-.3921	-.0111	-.1418	.2990	-.2021	-.1502	-.0732	-.0246
60.000			.5305	.0582	-.2616	-.3179	-.4080	-.0890	-.0157	-.4[illegible]	.5908	-.3122	-.1811	.0036	.0084
90.000		1.0440	.6615	.1833	-.1662	-.2338	-.3220	.1813	.4756		.3543	-.3751	-.1858	-.0825	-.0468
120.000			.7765	.2957	-.0793	-.1545	-.2439	.1283	.5214	.1546	.2711	.1865	.0751	-.0220	-.1410
135.000								-.1513		.3649		.1884		-.0431	
150.000			.8352	.3436	-.0376	-.1108	-.2223	-.1517	.4057	.5042	.2245	.1930	-.0425	-.1638	-.2011

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T49)

ALPHAT(1) = -8.550 BETAT (2) = -4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
165.000				.3433	-.0365	-.1163	-.2146	-.1652	.3693	.5398	.3657	.1506	-.0241	-.1151	-.1942
180.000	1.1760	1.2000	.8083	.3150	-.0570	-.1331	-.2229	-.1533	.3150	.5400	.3688	.1017	-.0322	-.1393	-.1761
270.000		.8447							.4731						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0314	.0371	-.0281
30.000	-.0393	.0217	.0295
60.000	-.0161	.0360	.1608
90.000	-.0200	.0445	
120.000	-.0299	-.0114	.0680
135.000	-.0314	-.0102	.0202
150.000	-.0513	-.0614	.0362
165.000	-.0301	-.0232	-.1224
180.000	-.0311	-.0165	-.1114

ALPHAT(1) = -8.530 BETAT (3) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1930	.8024	.3952	-.0520	-.3380	-.3899	-.4488	-.3484	.0149	.0960	-.0741	-.2877	-.1280	.0155	.0320
30.000			.4098	-.0451	-.3341	-.3870	-.4477	-.3641	.0163	-.0295	-.2149	-.2398	-.1357	-.0494	-.0157
60.000			.4623	.0022	-.3037	-.3595	-.4423	-.1143	.0370	-.4259	-.5579	-.2534	-.2233	-.0714	-.0018
90.000		.9517	.5563	.0836	-.2426	-.3047	-.3878	.0332	.4829		-.4079	-.4081	-.1479	-.0835	-.0857
120.000			.6727	.1964	-.1603	-.2278	-.3131	.1240	.4135	.2455	.2063	.1121	.0172	-.0821	-.1997
135.000								-.0972		.3926		.0975		-.1281	
150.000			.7639	.2767	-.0919	-.1646	-.2708	-.2089	.3613	.4899	.1734	-.0153	-.1177	-.2487	-.2865
165.000				.3113	-.0620	-.1400	-.2329	-.1856	.3603	.5415	.3122	.1372	-.0059	-.1041	-.1433
180.000	1.1930	1.2000	.8143	.3177	-.0574	-.1303	-.2249	-.1188	.3065	.5286	.3853	.0722	.0014	-.1436	-.2301
270.000		.9441							.4733						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0072	.0714	-.0389
30.000	-.0353	.0646	.0098
60.000	-.0112	.0708	.1944
90.000	-.0294	.0447	
120.000	-.0271	.0173	-.0375
135.000	-.0450	.0103	-.0993
150.000	-.0625	-.0584	-.0899

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T49)

ALPHAT(1) = -8.530 BETAT (3) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
165.000	-.0411	.0012	-.1363
180.000	-.0362	-.0002	-.1066

ALPHAT(1) = -8.540 BETAT (4) = 4.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1780	.7862	.3915	-.0631	-.3467	-.3976	-.4587	-.3450	.0089	.0751	-.0853	-.2974	-.1190	.0253	.0187
30.000			.3790	-.0713	-.3496	-.4028	-.4583	-.1412	-.0008	.0114	-.1753	-.2580	-.0875	.0020	-.0088
60.000			.3936	-.0574	-.3444	-.3935	-.4423	-.1080	-.0456	-.3563	-.5283	-.1966	-.1347	-.0917	-.0190
90.000		.8496	.4538	-.0055	-.3122	-.3669	-.1108	-.0719	.4717		-.3763	-.4351	-.1343	-.0888	-.0904
120.000			.5588	.0901	-.2400	-.3054	-.3757	.0653	.2569	.3124	.1406	.0631	-.0170	-.1289	-.2301
135.000								.0697		.3876		.0232		-.1817	
150.000			.6733	.1936	-.1570	-.2264	-.3270	-.0440	.2888	.4338	.0537	-.1207	-.1926	-.3400	-.3223
165.000				.2672	-.0983	-.1739	-.2696	-.1988	.2998	.4772	.2874	.0934	.0259	-.1038	-.2282
180.000	1.1780	1.1940	.8005	.3075	-.0638	-.1395	-.2371	-.0713	.2753	.4758	.3872	.0683	.0057	-.1919	-.2475
270.000		1.0420							.4658						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0428	.0401	-.0313
30.000	-.0465	.0421	-.0344
60.000	-.0337	.0585	.1468
90.000	-.0871	-.0407	
120.000	-.0662	-.0511	-.1287
135.000	-.0929	-.0651	-.1992
150.000	-.1077	-.1294	-.2122
165.000	-.0832	-.0618	-.2222
180.000	-.0828	-.0643	-.2986

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T49)

ALPHAT(1) = -8.570 BETAT (5) = 8.280

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1250	.7570	.3589	-.0789	-.3657	-.4200	-.4798	-.1063	-.0348	.0219	-.1314	-.2463	-.1160	-.0428	-.0225
30.000			.3273	-.1124	-.3770	-.4273	-.3485	-.1061	-.0409	-.0258	-.2084	-.2722	-.1122	-.0448	-.0292
60.000			.3228	-.1140	-.3772	-.4225	-.1102	-.1136	-.1259	-.1140	-.4657	-.1637	-.0859	-.0651	-.0584
90.000		.7473	.3573	-.0777	-.3642	-.3212	-.0782	-.1401	.3379		-.3678	-.4337	-.1771	-.1045	-.1385
120.000			.4523	-.0034	-.3098	-.3729	-.0350	-.0332	.2635	.2838	.1683	.0397	-.0701	-.1925	-.2959
135.000								-.0354		.3816		-.0078		-.2603	
150.000			.5816	.1127	-.2243	-.2900	-.3833	-.0629	.2634	.3531	.0463	-.1947	-.3185	-.4318	-.3641
165.000				.2196	-.1387	-.2114	-.3058	-.1913	.2491	.3930	.2548	.0949	.0103	-.1892	-.3168
180.000	1.1250	1.1070	.7756	.2911	-.0797	-.1535	-.2467	-.0329	.2497	.4126	.3785	.0884	-.0440	-.2083	-.3095
270.000		1.1240							.4787						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0596	-.0177	-.0319
30.000	-.0440	.0208	-.0370
60.000	-.0381	.0298	.1268
90.000	-.1744	-.1799	
120.000	-.1383	-.0953	-.1748
135.000	-.1665	-.0967	-.2335
150.000	-.1840	-.1630	-.2633
165.000	-.1642	-.1167	-.2771
180.000	-.1640	-.1455	-.3613

ALPHAT(2) = -4.410 BETAT (1) = -8.260

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1860	.8514	.4668	-.0012	-.3092	-.3635	-.4342	-.3953	.0297	.0677	-.1446	-.2259	-.1503	-.0367	-.0063
30.000			.5642	.0876	-.2393	-.3041	-.3806	-.3361	-.0183	-.1514	-.3262	-.1303	-.1339	-.1121	-.0185
60.000			.5880	.2044	-.1475	-.2173	-.3129	.0531	.1444	-.3540	-.5191	-.2733	-.1266	.0553	.0257
90.000		1.1770	.7906	.3030	-.0683	-.1433	-.2381	.3096	.5532		-.5637	-.3311	-.1500	-.0299	-.0081
120.000			.8222	.3413	-.0406	-.1191	-.2120	.1532	.4148	-.0434	.2354	.2670	.1559	.0494	-.0513
135.000								-.1443		.1756		.2252		.0453	
150.000			.7972	.3065	-.0654	-.1406	-.2459	-.1706	.2723	.4010	.2635	.1957	.0314	-.0917	-.1075
165.000				.2513	-.1147	-.1862	-.2786	-.2305	.2430	.4496	.3514	.1902	.0314	-.1271	-.1485
180.000	1.1860	1.1050	.6795	.1918	-.1533	-.2225	-.3000	-.2645	.2101	.4649	.2982	.1005	-.0272	-.1474	-.1809
270.000		.7973							.5157						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25 EXTERNAL TANK (RB1T49)

ALPHAT(2) = -4.410 BETAT (1) = -8.260

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0610	-.0402	-.0278
30.000	-.0432	-.0331	.0068
60.000	.0174	.0779	.1151
90.000	.0278	.0963	
120.000	-.0065	.1055	.2572
135.000	.0290	.1110	.1991
150.000	.0284	.0844	.2606
165.000	.0276	.0953	-.0294
180.000	.0043	.0761	-.0582

ALPHAT(2) = -4.320 BETAT (2) = -4.210

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2350	.8954	.4919	.0217	-.2929	-.3494	-.4188	-.3735	.0650	.1165	-.0935	-.2518	-.1797	.0167	.0618
30.000			.5415	.0622	-.2552	-.3218	-.3916	-.3529	.0491	-.0440	-.2287	-.2197	-.1159	-.0931	-.0053
60.000			.6182	.1282	-.2041	-.2720	-.3592	-.0700	.1601	-.3208	-.5116	-.2180	-.2065	-.0176	.0184
90.000		1.0980	.6947	.2052	-.1483	-.2195	-.3084	.1672	.5492		-.5481	-.3731	-.1548	-.0584	-.0424
120.000			.7412	.2503	-.1141	-.1896	-.2755	-.0726	.4290	.0161	.1352	.1763	.0836	-.0092	-.1332
135.000								-.2264		.2495		.1498		-.0193	
150.000			.7515	.2579	-.1114	-.1837	-.2834	-.2197	.3044	.4301	.1126	.1424	-.0406	-.1423	-.1790
165.000				.2353	-.1279	-.1987	-.2899	-.2439	.2603	.4613	.2900	.0987	-.0324	-.1253	-.1784
180.000	1.2350	1.1200	.7027	.2044	-.1450	-.2182	-.2979	-.2112	.2044	.4450	.3139	.0239	-.0529	-.1533	-.1983
270.000		.9005							.5825						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0238	.0190	-.0240
30.000	-.0155	.0347	.0322
60.000	.0142	.0901	.1423
90.000	-.0102	.1258	
120.000	-.0240	.0744	.1499
135.000	-.0061	.0607	.1078
150.000	-.0235	.0278	.1682
165.000	-.0049	.0492	-.0940
180.000	-.0151	.0375	-.0946

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (R81T49)

ALPHAT(2) = -4.320 BETAT (3) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.3000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2510	.9076	.4922	.0140	-.2875	-.3427	-.4125	-.3694	.0818	.1293	-.0685	-.2447	-.2018	.0033	.0416
30.000			.5016	.0281	-.2807	-.3452	-.4097	-.3658	.0617	.0568	-.1646	-.2963	-.1303	-.0244	-.0004
60.000			.5352	.0606	-.2603	-.3195	-.4054	-.1433	.1785	-.2754	-.4894	-.1652	-.0933	-.1283	-.0049
90.000		1.0030	.5872	.0993	-.2265	-.2916	-.3737	.0586	.5581		-.5421	-.4236	-.1360	-.0899	-.0715
120.000			.6439	.1548	-.1862	-.2568	-.3388	.0252	.3511	.0986	.1562	.0831	.0118	-.0747	-.1935
135.000								-.2140		.3026		.0444		-.1103	
150.000			.6906	.1970	-.1590	-.2228	-.3234	-.2621	.2603	.3776	.0639	-.0514	-.0991	-.2304	-.2713
165.000				.2153	-.1392	-.2127	-.3027	-.2604	.2629	.4059	.2533	.0920	-.0200	-.1276	-.1646
180.000	1.2510	1.1250	.7111	.2149	-.1402	-.2113	-.2986	-.1766	.2126	.4024	.3362	.0336	-.0093	-.1502	-.1818
270.000		.9984							.5517						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0079	.0695	-.0085
30.000	-.0150	.0654	.0025
60.000	.0173	.0954	.1504
90.000	-.0180	.0950	
120.000	.0163	.0613	.0194
135.000	-.0081	.0554	-.0498
150.000	-.0258	-.0063	-.0451
165.000	-.0043	.0411	-.1074
180.000	-.0108	.0427	-.1007

ALPHAT(2) = -4.310 BETAT (4) = 4.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2330	.8924	.4878	.0222	-.2920	-.3481	-.4175	-.3753	.0678	.1077	-.0870	-.2544	-.1920	.0261	.0518
30.000			.4614	-.0071	-.3087	-.3666	-.4268	-.3575	.0428	.0551	-.1203	-.3074	-.1079	.0145	.0400
60.000			.4581	-.0085	-.3068	-.3607	-.4391	-.0762	.1352	-.2069	-.4344	-.1330	-.0481	-.0521	-.0317
90.000		.8985	.4850	.0250	-.2938	-.3489	-.4225	-.0176	.5911		-.5521	-.4655	-.1407	-.0944	-.0602
120.000			.5378	.0651	-.2557	-.3188	-.3954	.0389	.1456	.2051	.0893	.0213	-.0296	-.1090	-.2027
135.000								.0493		.2262		-.0243		-.1630	
150.000			.6144	.1216	-.2095	-.2737	-.3721	.0324	.2000	.3257	-.0270	-.1624	-.1734	-.3283	-.3101
165.000				.1736	-.1707	-.2415	-.3327	-.2781	.2212	.3716	.2367	.0355	.0025	-.0930	-.1800
180.000	1.2330	1.1210	.7034	.2074	-.1466	-.2161	-.3075	-.1472	.1953	.3681	.3366	.0304	.0015	-.1480	-.2278
270.000		1.0960							.5381						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T49)

ALPHAT(2) = -4.320 BETAT (4) = 4.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0332	.0058	-.0176
30.000	-.0297	.0285	-.0140
60.000	-.0410	.0436	.1109
90.000	-.0592	.0228	
120.000	-.0447	-.0131	-.0947
135.000	-.0710	-.0179	-.1693
150.000	-.0780	-.0847	-.1898
165.000	-.0559	-.0184	-.2062
180.000	-.0553	-.0132	-.2904

ALPHAT(2) = -4.330 BETAT (5) = 8.260

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1780	.8413	.4529	-.0021	-.3102	-.3700	-.4395	-.3847	.0277	.0489	-.1407	-.2175	-.1666	-.0546	-.0144
30.000			.5969	-.0542	-.3432	-.3982	-.4589	-.0768	.0006	-.0400	-.1685	-.2959	-.1188	-.0277	.0147
60.000			.3780	-.0730	-.3504	-.3984	-.4289	-.0745	.0441	-.1249	-.3904	-.1355	-.0542	-.0378	-.0282
90.000		.7949	.3877	-.0614	-.3467	-.3960	-.0869	-.0658	.5103		-.4189	-.4338	-.2157	-.1180	-.1182
120.000			.4411	-.0161	-.3215	-.3768	-.0419	-.0179	.0394	.2262	.0585	-.0099	-.0814	-.1936	-.2677
135.000								-.0021		.3073		-.0531		-.2519	
150.000			.5258	.0482	-.2695	-.3304	-.3460	.0026	.1544	.2986	.0075	-.2312	-.3035	-.4272	-.3332
165.000				.1245	-.2075	-.2792	-.3656	-.0784	.1701	.3251	.1866	.0333	-.0122	-.2015	-.2993
180.000	1.1780	1.0260	.6742	.1850	-.1623	-.2349	-.3206	-.1232	.1823	.3226	.3082	.0469	-.0570	-.2296	-.3072
270.00		1.1740							.5468						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0667	-.0429	-.0323
30.000	-.0533	.0127	-.0226
60.000	-.0703	.0239	.0962
90.000	-.1542	-.0704	
120.000	-.1084	-.0358	-.1393
135.000	-.1384	-.0332	-.1968
150.000	-.1352	-.0921	-.2273
165.000	-.1234	-.0614	-.2485
180.000	-.1334	-.0828	-.3235

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T49)

ALPHAT(3) = -.610 BETAT (1) = -8.270

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2030	.9351	.5543	.0716	-.2497	-.3120	-.3891	-.3496	.0891	.0877	-.1105	-.1652	-.1737	-.0910	.0011
30.000			.6621	.1764	-.1715	-.2415	-.3200	-.2827	.0509	-.0697	-.2803	-.1035	-.0957	-.1043	-.0360
60.000			.7583	.2675	-.0954	-.1660	-.2674	.0789	.2625	-.2542	-.3432	-.1585	-.1576	.0147	.0435
90.000		1.1960	.8050	.3127	-.0622	-.1385	-.2320	.3353	.5747		-.5038	-.4218	-.2748	-.0468	.0048
120.000			.7772	.2906	-.0814	-.1575	-.2457	.1011	.3140	-.1703	-.1696	.2356	.2177	.0912	-.0021
135.000								-.1510		-.0214		.1418		.0726	
150.000			.7107	.2249	-.1337	-.2035	-.3037	-.2331	.1749	.2832	.2193	.1012	.0801	-.0664	-.0612
165.000				.1559	-.1878	-.2590	-.3398	-.2978	.1653	.3670	.2786	.1499	.0489	-.1019	-.0875
180.000	1.2030	1.0240	.5859	.1000	-.2226	-.2881	-.3599	-.2822	.1598	.3745	.2490	.0757	.0045	-.1422	-.1394
270.000		.8101							.6891						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0436	-.0361	-.0417
30.000	-.0055	.0189	-.0118
60.000	.0558	.1390	.1218
90.000	.0444	.1644	
120.000	.0014	.2448	.3082
135.000	.0524	.2358	.2312
150.000	.0518	.1908	.2930
165.000	.0641	.1911	-.0086
180.000	.0447	.1465	-.0531

ALPHAT(3) = -.990 BETAT (2) = -4.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2540	.9875	.5843	.0931	-.2347	-.2974	-.3723	-.3316	.1218	.1364	-.0638	-.2079	-.1950	-.0370	.0528
30.000			.6338	.1384	-.1964	-.2665	-.3410	-.3014	.0897	.0314	-.2133	-.1896	-.1020	-.0797	.0059
60.000			.6824	.1875	-.1595	-.2267	-.3220	-.1548	.2809	-.2108	-.3731	-.1537	-.0619	-.1149	.0171
90.000		1.1160	.7068	.2143	-.1434	-.2132	-.3019	.1803	.5751		-.5083	-.4836	-.3008	-.1069	-.0365
120.000			.6974	.2065	-.1488	-.2199	-.3053	-.0918	.3435	-.1123	-.1347	.0731	.1278	.0308	-.0803
135.000								-.2698		.1106		-.0381		.0116	
150.000			.6698	.1729	-.1721	-.2418	-.3346	-.2647	.2187	.3376	.1057	.0024	.0376	-.0986	-.1232
165.000				.1393	-.1978	-.2607	-.3478	-.2997	.1821	.3806	.2405	.0570	-.0162	-.1011	-.1054
180.000	1.2540	1.0380	.6108	.1087	-.2145	-.2803	-.3545	-.2080	.1395	.3428	.2674	-.0029	-.0253	-.1061	-.1439
270.000		.9171							.6223						

/LT	.7460	.8530	.9280

PHI

ARC11-716 IA14 OI+T12+S12N25 EXTERNAL TANK (RB1T49)

ALPHAT(3) = -.590 BETAT (2) = -4.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0073	.0129	-.0112
30.000	.0104	.0449	.0216
60.000	.0511	.1303	.1080
90.000	.0228	.1769	
120.000	-.0234	.1906	.2345
135.000	-.0039	.1716	.1652
150.000	-.0028	.1315	.2359
165.000	.0225	.1450	-.0681
180.000	.0151	.1148	-.0752

ALPHAT(3) = -.580 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2730	1.0070	.5925	.1056	-.2238	-.2900	-.3637	-.3204	.1320	.1564	-.0359	-.1960	-.2248	-.0315	.0288
30.000			.5996	.1060	-.2224	-.2902	-.3612	-.3185	.1120	.1062	-.1413	-.2252	-.1284	-.0474	.0182
60.000			.6004	.1082	-.2188	-.2797	-.3682	-.2467	.3131	-.1509	-.3316	-.1759	-.0351	-.0476	-.0318
90.000		1.0270	.6050	.1199	-.2133	-.2778	-.3601	.0652	.5908		-.5343	-.3865	-.2090	-.1424	-.0780
120.000			.6099	.1230	-.2108	-.2772	-.3558	-.1294	.3172	-.0372	-.0877	-.0171	.0311	-.0166	-.1414
135.000								-.3050		.2047		-.1388		-.0417	
150.000			.6232	.1230	-.2077	-.2727	-.3611	-.2982	.1812	.3367	.0216	-.1245	-.0742	-.1560	-.2162
165.000				.1238	-.2057	-.2720	-.3562	-.3029	.1894	.3101	.2266	.0007	-.0546	-.1069	-.1532
180.000	1.2730	1.0390	.6181	.1178	-.2086	-.2733	-.3537	-.1341	.1590	.3022	.2832	-.0161	-.0859	-.0911	-.1291
270.000		1.0200							.5969						

X/LT	.7460	.8530	.9280
PHI			
.000	.0312	.0671	.0241
30.000	.0263	.0724	.0378
60.000	.0238	.1065	.0938
90.000	.0338	.1456	
120.000	.0224	.1370	.1271
135.000	.0053	.1300	.0388
150.000	-.0164	.0722	.0441
165.000	.0039	.1062	-.0873
180.000	.0199	.1069	-.0918

ARC11-716 IA14 OI+T12+S1EN25 EXTERNAL TANK (RB1T49)

ALPHAT(3) = -.990 BETAT (4) = 4.120

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.2550	.9651	.5803	.0833	-.2308	-.2930	-.3698	-.3319	.1213	.1388	-.0584	-.2032	-.2038	-.0451	.0467
30.000			.5323	.0583	-.2622	-.3227	-.3911	-.3516	.1026	.0925	-.1045	-.2422	-.1565	-.0131	.0273
60.000			.5065	.0270	-.2765	-.3337	-.4163	-.1219	.2560	-.0962	-.2881	-.1907	-.0640	.0039	.0112
90.000		.9226	.4998	.0230	-.2818	-.3399	-.4159	-.0016	.6148		-.5561	-.0415	-.0358	-.0247	-.0603
120.000			.5145	.0495	-.2711	-.3329	-.4086	.0061	.1601	.0473	-.0719	.0102	-.0147	-.0534	-.1537
135.000								.0190		.2284		-.1091		-.0908	
150.000			.5523	.0696	-.2537	-.3120	-.4043	-.0024	.1462	.2089	-.0459	-.2161	-.1237	-.2526	-.2499
165.000				.0976	-.2317	-.2961	-.3822	-.2339	.1686	.2913	.1777	-.0093	-.0038	-.0586	-.1333
180.000	1.2550	1.0370	.6097	.1167	-.2159	-.2783	-.3670	-.1872	.1413	.2996	.2917	-.0139	.0222	-.0780	-.1575
270.000		1.1120							.5789						

X/LT	.7480	.8530	.9280
PHI			
.000	.0076	-.0044	-.0003
30.000	.0017	.0141	.0199
60.000	-.0077	.0499	.1318
90.000	-.0382	.0764	
120.000	-.0038	.0483	-.0306
135.000	-.0218	.0421	-.1132
150.000	-.0326	-.0138	-.1302
165.000	-.0192	.0491	-.1676
180.000	-.0239	.0627	-.2550

ALPHAT(3) = -.990 BETAT (5) = 9.280

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.1990	.9327	.5473	.0709	-.2495	-.3157	-.3904	-.3500	.0848	.0810	-.1079	-.1678	-.1841	-.1047	-.0030
30.000			.4594	.0018	-.3046	-.3675	-.4321	-.1854	.0662	-.0624	-.1634	-.2844	-.1473	-.0382	.0186
60.000			.4146	-.0479	-.3284	-.3822	-.4524	-.0529	.1338	-.0269	-.2413	-.1561	-.0697	-.0344	-.0231
90.000		.8147	.3995	-.0472	-.3352	-.3881	-.4467	-.0670	.6561		-.4682	-.0406	-.0776	-.0680	-.1090
120.000			.4191	-.0344	-.3302	-.3844	-.1352	-.0512	.0251	.1378	-.0569	-.0317	-.0590	-.1418	-.2196
135.000								-.0341		.1214		-.0943		-.1822	
150.000			.4736	.0062	-.3009	-.3578	-.3141	-.0210	.1178	.2216	-.0669	-.2552	-.1967	-.3352	-.2830
165.000				.0532	-.2660	-.3285	-.4068	-.0182	.1455	.2605	.1443	-.0337	-.0189	-.1524	-.2403
180.000	1.1990	.9440	.5651	.0979	-.2328	-.2969	-.3757	-.1265	.1410	.2620	.2457	-.0240	-.0344	-.2258	-.2375
270.000		1.1940							.3791						

X/LT	.7480	.8530	.9280
PHI			

ARC11-716 IA14 01+Y12+S12N25 EXTERNAL TANK (RB1T49)

ALPHAT(3) = -.990 BETAT (3) = 8.260

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	-.0414	-.0333	-.0431
30.000	-.0307	.0066	-.0189
60.000	-.0475	.0287	.1256
90.000	-.1171	.0230	
120.000	-.0573	.0189	-.0765
135.000	-.0877	.0172	-.1497
150.000	-.0882	-.0392	-.1911
165.000	-.0798	-.0110	-.2047
180.000	-.0923	-.0120	-.3200

ALPHAT(4) = 4.060 BETAT (1) = -8.280

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1900	1.0350	.6633	.1789	-.1695	-.2387	-.3189	-.2823	.0739	.1057	-.0573	-.1172	-.1305	-.0823	-.0261
30.000			.7722	.2822	-.0835	-.1594	-.2458	-.1965	.1487	.0183	-.1269	-.0944	-.0478	-.0420	-.0100
60.000			.8258	.3556	-.0409	-.1150	-.2212	.1451	.3827	-.1304	-.2003	-.1248	.0357	.0470	.0416
90.000		1.1790	.7956	.3091	-.0639	-.1390	-.2348	.3251	.5477		-.3599	-.2185	-.0165	-.1056	-.0612
120.000			.6940	.2153	-.1408	-.2125	-.2987	.0291	.1553	-.3055	-.3885	-.2627	.2034	.1929	.0866
135.000								-.1751		-.1910		-.1180		.1486	
150.000			.5958	.1159	-.2162	-.2790	-.3723	-.2936	.0414	.1086	.1113	-.1598	.0421	.0073	-.0054
165.000				.0482	-.2739	-.3334	-.4112	-.3631	.0675	.3038	.2005	.0495	-.0198	.0050	-.0087
180.000	1.1900	.9132	.4767	.0080	-.2968	-.3547	-.4212	-.1559	.1063	.2838	.2120	.0099	-.1990	-.0186	-.0714
270.000		.7964							.6807						

X/LT	.7480	.8530	.9280
PHI			
.000	.0054	-.0188	-.0524
30.000	.0511	.0753	-.0097
60.000	.0764	.1656	.0973
90.000	.0562	.0765	
120.000	.1013	.3364	.3416
135.000	.1187	.3245	.2673
150.000	.1105	.2449	.3471
165.000	.1255	.2361	.0070
180.000	.0995	.1835	-.0549

ARC11-716 IA14 O1+T12+S12NE5 EXTERNAL TANK (RB1T49)

ALPHAT(4) = 3.980 BETAT (2) = -4.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2390	1.0890	.8852	.1989	-.1534	-.2224	-.3061	-.2677	.1497	.1756	-.0166	-.1358	-.1388	-.0513	.0579
30.000			.7349	.2402	-.1220	-.1964	-.2780	-.2363	.1820	.1045	-.1134	-.1267	-.0932	-.0420	.0212
60.000			.7368	.2443	-.1185	-.1893	-.2880	-.0839	.3830	-.0818	-.1855	-.1657	-.0133	-.0030	.0157
90.000		1.0930	.8920	.2042	-.1505	-.2209	-.3098	.1594	.5427		-.4275	-.2826	-.0052	-.0420	-.0442
120.000			.6189	.1527	-.1999	-.2681	-.3907	-.1487	.2105	-.2586	-.3704	-.2629	.0871	.1023	-.0022
135.000								-.3271		-.0925		-.2141		.0809	
150.000			.5995	.0780	-.2412	-.3051	-.3977	-.3327	.1192	.2273	.1048	-.1921	-.0771	-.0201	-.0628
165.000				.0459	-.2747	-.3313	-.4099	-.3330	.1147	.2723	.2082	.0438	-.1325	.0043	-.0524
180.000	1.2390	.9228	.4976	.0227	-.2890	-.3431	-.4142	-.0936	.0820	.2288	.2394	-.0075	-.1700	-.0233	-.0866
270.000		.9043							.5972						

X/LT	.7480	.8530	.9280
PHI			
.000	.0673	.0211	.0575
30.000	.0765	.0693	.0804
60.000	.0775	.1355	.1268
90.000	.0518	.1702	
120.000	.0545	.2690	.2374
135.000	.0710	.2567	.1679
150.000	.0748	.1966	.2404
165.000	.0881	.2041	-.0532
180.000	.0769	.1658	-.0706

ALPHAT(4) = 3.980 BETAT (3) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2600	1.1080	.7013	.2028	-.1478	-.2206	-.3043	-.2632	.1563	.1992	.0057	-.1487	-.1172	-.0520	.0134
30.000			.6802	.1868	-.1591	-.2348	-.3118	-.2727	.1665	.1503	-.0889	-.1404	-.1070	-.0534	.0038
60.000			.6470	.1457	-.1879	-.2562	-.3474	-.1481	.3044	-.0249	-.1987	-.0874	-.0603	-.0343	-.0070
90.000		1.0080	.5906	.1066	-.2239	-.2912	-.3718	.0518	.5658		-.5113	-.2222	-.0541	-.1024	-.0694
120.000			.5419	.0692	-.2569	-.3192	-.3929	-.1414	.2633	-.1907	-.3344	-.1854	.0245	.0225	-.0727
135.000								-.3076		.0527		-.2849		.0105	
150.000			.5198	.0469	-.2706	-.3332	-.4172	-.2794	.1214	.2569	.0414	-.2096	-.1304	-.0710	-.1431
165.000				.0290	-.2781	-.3385	-.4134	-.0643	.0941	.2302	.2147	-.0374	-.1080	-.0285	-.0796
180.000	1.2600	.9260	.5053	.0200	-.2820	-.3387	-.4119	-.0844	.0933	.2351	.2551	-.0391	-.2229	-.0177	-.0804
270.000		1.0080							.5681						

X/LT	.7480	.8530	.9280
PHI			

ARC11-716 IA14 OL+T12+S12N25 EXTERNAL TANK (RB1T49)

ALPHAT(4) = 3.980 BETAT (3) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	.0208	.0794	.0580
30.000	.0677	.0919	.0632
60.000	.0448	.1240	.1304
90.000	.0524	.1535	
120.000	.0611	.2019	.1330
135.000	.0654	.1919	.0554
150.000	.0396	.1434	.0832
165.000	.0580	.1627	-.0861
180.000	.0641	.1610	-.0909

ALPHAT(4) = 3.980 BETAT (4) = 4.150

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.2430	1.0840	.6848	.1952	-.1529	-.2261	-.3109	-.2695	.1425	.1676	-.0129	-.1326	-.1510	-.0646	.0464
30.000			.6109	.1238	-.2064	-.2759	-.3494	-.3148	.1504	.1468	-.0822	-.1750	-.1078	-.0801	.0297
60.000			.5425	.0617	-.2566	-.3161	-.4010	-.0430	.1394	.0450	-.2008	-.0435	-.0616	.0025	.0057
90.000		.9048	.4898	.0265	-.2914	-.3496	-.4199	-.0186	.5966		-.5091	-.0993	-.0842	-.0943	-.0522
120.000			.4633	-.0039	-.3042	-.3634	-.4313	-.0356	.1737	-.1010	-.2531	-.0643	-.0299	-.0262	-.0865
135.000								-.0547		.1739		-.2262		-.0347	
150.000			.4734	-.0026	-.3072	-.3607	-.4380	-.0534	.0638	.2375	.0088	-.2841	-.1439	-.1228	-.1840
165.000				.0122	-.2959	-.3570	-.4299	-.0551	.1099	.2495	.1404	-.0622	-.1104	.0093	-.0659
180.000	1.2430	.9285	.5008	.0239	-.2922	-.3502	-.4207	-.1270	.0993	.2409	.2593	-.0489	-.2377	-.0143	-.0869
270.000		1.1020							.5592						

X/LT	.7480	.8590	.9280
PHI			
.000	.0667	.0128	.0601
30.000	.0447	.0226	.0466
60.000	.0333	.0461	.1003
90.000	.0322	.0992	
120.000	.0355	.1023	.0070
135.000	.0224	.0894	-.0899
150.000	.0143	.0343	-.0989
165.000	.0251	.0852	-.1480
180.000	.0300	.0961	-.2359

ARC11-716 IA14 OX+T12+S12M25 EXTERNAL TANK (RB1T49)

ALPHAT(4) = 5.000 BETAT (5) = 8.320

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1890	1.0320	.6961	.1781	-.1688	-.2387	-.3244	-.2888	.1038	.0874	-.0601	-.1215	-.1477	-.0857	-.0412
30.000			.5305	.0582	-.2615	-.3253	-.3958	-.3535	.1221	.1200	-.0811	-.1612	-.1219	-.0619	-.0115
60.000			.4392	-.0221	-.3210	-.3745	-.4542	-.0442	.0009	.1451	-.1174	-.0572	-.0931	-.0494	-.0392
90.000		.7989	.3912	-.0636	-.3476	-.3980	-.3957	-.0807	.6574		-.4374	-.0193	-.0720	-.1006	-.0823
120.000			.3763	-.0680	-.3503	-.4034	-.4124	-.0676	.0975	-.0318	-.2248	-.0530	-.0677	-.1026	-.1506
135.000								-.0743		.1798		-.1019		-.1208	
150.000			.4026	-.0558	-.3461	-.3927	-.2941	-.0593	.0236	.1529	-.0365	-.3288	-.1832	-.2255	-.2144
165.000				-.0313	-.3231	-.3869	-.4388	-.0623	.0899	.2134	.1227	-.0874	-.0814	-.1216	-.1790
180.000	1.1890	.8580	.4773	-.0031	-.3052	-.3688	-.4400	-.0400	.1041	.2216	.2059	-.0757	-.0792	-.1828	-.1830
270.000		1.1810							.5601						

X/LT	.7480	.8530	.9280
PHI			
.000	.0074	-.0241	-.0400
30.000	.0125	-.0082	.0050
60.000	.0031	.0328	.0867
90.000	-.0073	.0722	
120.000	-.0038	.0669	-.0302
135.000	-.0263	.0596	-.1273
150.000	-.0478	.0003	-.1737
165.000	-.0259	.0203	-.1928
180.000	-.0440	.0091	-.3213

ALPHAT(5) = 8.110 BETAT (1) = -8.280

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1470	1.1140	.7604	.2759	-.0915	-.1666	-.2509	-.2141	.0370	.1318	-.0056	-.0420	-.0880	-.0612	-.0444
30.000			.6670	.3781	-.0067	-.0864	-.1775	-.1314	.2350	.0900	-.0818	-.0141	-.0017	.0119	.0313
60.000			.6729	.3867	.0013	-.0759	-.1859	.2307	.4631	-.0305	-.0937	-.0545	.0504	.0882	.0788
90.000		1.1310	.7663	.2937	-.0783	- 1540	-.2509	.3157	.4808		-.3240	-.2206	-.0201	.0596	.0941
120.000			.6069	.1440	-.1977	-.2670	-.3530	-.0318	-.0111	-.1666	-.3201	-.2583	.0301	.1249	.1170
135.000								-.1578		-.1646		-.2288		.1304	
150.000			.4863	.0205	-.2850	-.3491	-.4382	-.2515	-.0472	.1257	-.0487	-.2000	-.0104	.0164	.0387
165.000				-.0362	-.3355	-.3930	-.4695	-.1330	.0188	.2327	.1608	.0243	-.0463	.0366	.0338
180.000	1.1470	.8079	.3820	-.0684	-.3562	-.4080	-.4677	-.1180	.0280	.1975	.1730	-.0240	-.1440	.0031	-.0086
270.000		.7512							.5431						

X/LT	.7480	.8530	.9280
PHI			

ARC11-718 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T49)

ALPHAT(5) = 8.110 BETAT (1) = -8.280

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0446	.0203	.0071
30.000	.1011	.1155	.0753
60.000	.1286	.2027	.1559
90.000	.1464	.2197	
120.000	.1676	.3206	.2426
135.000	.1949	.3224	.2138
150.000	.1505	.2395	.3163
165.000	.1556	.2322	-.0080
180.000	.1220	.1833	-.0572

ALPHAT(5) = 8.100 BETAT (2) = -4.140

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1960	1.1720	.7981	.3049	-.0691	-.1428	-.2349	-.1968	.1435	.2107	.0428	-.0585	-.0440	-.0430	.0149
30.000			.8278	.3359	-.0439	-.1242	-.2114	-.1725	.2490	.1724	-.0587	-.0204	-.0104	-.0110	.0059
60.000			.7772	.2881	-.0811	-.1523	-.2578	-.0627	.4551	.0171	-.1150	.0098	.0179	.0130	.0092
90.000		1.0440	.6645	.1891	-.1624	-.2337	-.3237	.1607	.4643		-.3756	-.1545	-.0204	.0092	-.0162
120.000			.5401	.0702	-.2529	-.3177	-.3986	-.1029	.0587	-.1531	-.3880	-.2791	.0132	.0855	.0562
135.000								-.2296		-.1214		-.2713		.0686	
150.000			.4603	-.0041	-.3086	-.3650	-.4480	-.1889	.0163	.1567	-.0307	-.2572	-.0971	-.0247	-.0148
165.000				-.0323	-.3316	-.3894	-.4579	-.0976	.0477	.1901	.1322	.0207	-.1076	.0132	.0138
180.000	1.1980	.8159	.3979	-.0612	-.3400	-.3913	-.4560	-.0785	.0277	.1701	.2047	-.0263	-.1887	.0228	-.0100
270.000		.9576							.5222						

X/LT	.7460	.8530	.9280
PHI			
.000	.0562	.0614	.0841
30.000	.0741	.1139	.0780
60.000	.0758	.1665	.1071
90.000	.0812	.1594	
120.000	.1159	.3018	.2373
135.000	.1291	.2386	.1739
150.000	.1080	.2227	.2484
165.000	.1318	.2314	-.0467
180.000	.1137	.1951	-.0623

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T49)

ALPHAT(5) = 8.200 BETAT (3) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2160	1.1900	.8041	.3129	-.0663	-.1397	-.2335	-.1929	.1599	.2458	.0658	-.0658	-.0448	-.0199	.0089
30.000			.7657	.2750	-.0951	-.1727	-.2594	-.2210	.2500	.2251	-.0151	-.0676	-.0503	-.0328	-.0017
60.000			.6722	.1849	-.1677	-.2339	-.3321	-.1574	.3864	.0767	-.0927	-.0599	-.0249	-.0056	.0119
90.000		.9537	.5594	.0828	-.2480	-.3114	-.3952	.0275	.4798		-.3618	-.1629	.0160	.0107	-.0115
120.000			.4697	.0073	-.3059	-.3658	-.4418	-.0881	.1256	-.1190	-.3896	-.2421	.0013	.0301	-.0033
135.000								-.0694		-.0155		-.3286		.0193	
150.000			.4262	-.0376	-.3324	-.3837	-.4643	-.0782	.0164	.2200	.0140	-.2658	-.1227	-.0606	-.0661
165.000				-.0517	-.3417	-.3927	-.3023	-.0709	.0154	.1819	.2026	-.0549	-.1237	-.0068	-.0027
180.000	1.2160	.8143	.4040	-.0552	-.3412	-.3946	-.3204	-.0719	.0288	.1949	.2240	-.0505	-.1889	-.0094	.0026
270.000		.9612							.4790						

X/LT	.7460	.8530	.9280
PHI			
.000	.0543	.1233	.1185
30.000	.0545	.1251	.1071
60.000	.0617	.1394	.1166
90.000	.0623	.1672	
120.000	.0957	.2075	.0767
135.000	.0900	.2010	.0224
150.000	.0764	.1506	.0457
165.000	.1086	.1864	-.0763
180.000	.1096	.1833	-.0984

ALPHAT(5) = 8.180 BETAT (4) = 4.180

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1970	1.1680	.7896	.3006	-.0699	-.1449	-.2371	-.1952	.1124	.2063	.0454	-.0551	-.0466	-.0421	.0157
30.000			.6875	.2029	-.1469	-.2226	-.3020	-.2678	.2011	.2210	-.0064	-.0988	-.0945	-.0759	.0275
60.000			.5632	.0872	-.2407	-.3026	-.3912	-.0368	.1931	.1650	-.0621	-.0875	-.0878	-.0364	.0307
90.000		.8569	.4582	.0007	-.3094	-.3675	-.4420	-.0557	.5029		-.3804	-.4233	.0091	.0391	-.0045
120.000			.3977	-.0514	-.3419	-.3958	-.4631	-.0859	.0871	-.0380	-.3513	-.1976	.0058	.0350	-.0212
135.000								-.0766		.1548		-.2808		.0124	
150.000			.3887	-.0672	-.3500	-.4034	-.4717	-.0981	.0310	.2337	.0254	-.2655	-.1364	-.0505	-.1084
165.000				-.0688	-.3504	-.4024	-.4664	-.0814	.0436	.2356	.1487	-.1045	-.1194	.0175	.0127
180.000	1.1970	.8180	.3996	-.0643	-.3465	-.3968	-.4672	-.0784	.0650	.2211	.2230	-.0771	-.1763	.0267	-.0040
270.000		1.0370							.4747						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T49)

ALPHAT(5) = 8.180 BETAT (4) = 4.180

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0470	.0609	.0764
30.000	.0258	.0419	.0972
60.000	.0435	.0815	.1732
90.000	.0437	.1398	
120.000	.0749	.1433	-.0023
135.000	.0641	.1310	-.0771
150.000	.0445	.0713	-.0733
165.000	.0746	.1185	-.1376
180.000	.0726	.1177	-.2258

ALPHAT(5) = 8.140 BETAT (5) = 8.390

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1440	1.1150	.7598	.2845	-.0828	-.1588	-.2516	-.2076	.0296	.1166	.0029	-.0384	-.0869	-.0527	-.0479
30.000			.5922	.1261	-.2108	-.2802	-.3564	-.3239	.1556	.2144	-.0066	-.0946	-.1278	-.1029	-.0802
60.000			.4478	-.0091	-.3154	-.3706	-.4315	-.0824	.2631	.1675	-.0534	-.0973	-.0835	-.0734	-.0186
90.000		7483	.3594	-.0810	-.3623	-.4218	-.1205	-.1130	.5082		-.4037	-.1466	-.0380	-.0580	-.0835
120.000			.3236	- 1080	-.3749	-.4253	-.1351	-.0757	-.0285	-.0015	-.3298	-.0390	-.0287	-.0560	-.0936
135.000								-.0828		.1089		-.1537		-.0699	
150.000			.3350	-.1114	-.3767	-.4229	-.1560	-.0860	.0089	.1284	-.0264	-.2854	-.1256	-.1454	-.1494
165.000				-.1011	-.3710	-.4233	-.1621	-.0962	.0194	.1909	.0997	-.1142	-.0590	-.0732	-.1027
180.000	1.1440	.7328	.3774	-.0828	-.3636	-.4196	-.3848	-.0785	.0810	.1704	.1429	-.0861	-.0453	-.0968	-.1031
270.000		1.1420							.4873						

X/LT	.7460	.8530	.9280
PHI			
.000	.0357	.0193	.0299
30.000	.0150	-.0097	.0458
60.000	.0447	.0670	.1360
90.000	.0003	.1042	
120.000	.0416	.1072	-.0263
135.000	.0200	.0950	-.1088
150.000	-.0107	.0279	-.1342
165.000	.0211	.0613	-.1622
180.000	.0003	.0397	-.3037

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T50) (14 FEB 74)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES
LREF = 38.7090 INCHES YMRP = .0000 INCHES
BREF = 38.7090 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 1.250 ELEVON = .000
RUDDER = .000 SPOBRK = .000

ALPHAT(1) = -8.560 BETAT (1) = -8.160

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1810	.7856	.4003	-.0270	-.3445	-.3976	-.4554	-.3572	-.0207	.0359	-.1200	-.2276	-.2159	-.0812	-.0346
30.000			.4879	.0483	-.2897	-.3508	-.4170	-.3372	-.1372	-.2710	-.3652	-.2700	-.1670	-.1415	-.0848
60.000			.6295	.1727	-.1861	-.2516	-.2966	-.1121	.0375	-.3995	-.5296	-.4549	-.2212	-.0974	-.0288
90.000		1.1650	.7884	.3136	-.0679	-.1404	-.1933	.2458	.5420		-.3902	-.2358	-.2844	-.1940	-.0605
120.000			.8914	.4155	.0128	-.0651	-.1232	-.0481	.5199	.1204	.2823	.3144	.2140	.0958	-.0430
135.000								-.0573		.3141		.2855		.1018	
150.000			.9084	.4265	.0232	-.0542	-.1216	-.0684	.3352	.5089	.3325	.2716	.1016	-.0200	-.0692
165.000				.3701	-.0124	-.0867	-.1467	-.1085	.2462	.5286	.4218	.2624	.0803	-.0547	-.0904
180.000	1.1810	1.2170	.8065	.3162	-.0542	-.1251	-.1696	-.1527	.1975	.5083	.3678	.1946	.0346	-.0975	-.2009
270.000		.7874							.3852						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0319	-.0406	-.0282
30.000	-.0655	-.0530	.0393
60.000	-.0409	-.0353	.1022
90.000	-.0637	-.0928	
120.000	-.0650	.0364	.1982
135.000	-.0208	.0707	.0715
150.000	-.0612	.0067	.0676
165.000	-.1016	.0269	-.0884
180.000	-.0889	.0151	-.1723

ALPHAT(1) = -8.520 BETAT (2) = -4.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2300	.8293	.4275	-.0103	-.2731	-.3255	-.3797	-.3432	.0076	.1046	-.0302	-.2034	-.2372	-.0505	.0038
30.000			.4745	.0305	-.2499	-.3037	-.3654	-.3270	-.0559	-.1027	-.2177	-.2588	-.1438	-.1062	-.0455
60.000			.5687	.1088	-.1918	-.2495	-.3326	-.2666	.0409	-.3942	-.4973	-.4192	-.2387	-.1075	-.0434
90.000		1.0870	.6929	.2214	-.1067	-.1709	-.2574	.0983	.5280		-.4037	-.2812	-.3176	-.2421	-.0950
120.000			.8050	.3248	-.0252	-.0966	-.1843	-.1590	.4390	.1994	.2920	.2195	.1459	.0328	-.1173
135.000								-.1296		.3923		.2100		.0328	
150.000			.8604	.3734	.0115	-.0594	-.1634	-.1086	.3275	.5054	.2235	.1763	.0372	-.0680	-.1480

ARC11-716 IA14 01+T12+S12N25 EXTERNAL TANK (RB1T50)

ALPHAT(1) = -8.520 BETAT (2) = -4.080

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
165.000				.3745	.0115	-.0625	-.1575	-.1200	.2710	.5241	.4002	.1921	.0741	-.0164	-.1316
180.000	1.2300	1.2400	.8338	.3484	-.0054	-.0789	-.1636	-.1351	.2025	.5070	.4162	.1306	.0652	-.0320	-.1459
270.000		.8918							.5007						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0268	-.0344	-.0438
30.000	-.0437	-.0435	.0148
60.000	-.0479	-.0196	.1105
90.000	-.0752	-.0077	
120.000	-.1173	-.0066	.0991
135.000	-.0892	-.0021	-.0006
150.000	-.1243	-.0607	-.0088
165.000	-.1304	-.0226	-.1438
180.000	-.1257	.0058	-.2276

ALPHAT(1) = -8.510 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2450	.8444	.4375	-.0039	-.2652	-.3191	-.3739	-.3337	.0162	.1113	-.0040	-.2046	-.2115	-.0422	.0220
30.000			.4512	.0083	-.2637	-.3165	-.3726	-.3266	-.0377	-.0046	-.1395	-.2555	-.1502	-.0648	-.0267
60.000			.5026	.0550	-.2363	-.2904	-.3641	-.2287	.0194	-.3728	-.5176	-.2440	-.2134	-.0816	-.0124
90.000		.9950	.5952	.1332	-.1791	-.2397	-.3139	.0428	.5416		-.2698	-.3179	-.2611	-.0804	-.0730
120.000			.7059	.2334	-.1024	-.1697	-.2480	-.2099	.4398	.2718	.2391	.1460	.0737	-.0063	-.1636
135.000								-.1835		.4285		.1360		-.0466	
150.000			.7943	.3100	-.0431	-.1107	-.2036	-.1658	.3553	.5534	.1582	.0024	-.0422	-.1586	-.2253
165.000				.3452	-.0110	-.0872	-.1750	-.1428	.0660	.5766	.3382	.2078	.0880	-.0079	-.1609
180.000	1.2450	1.2400	.8402	.3517	-.0084	-.0796	-.1679	-.1134	.1638	.5060	.4293	.1207	-.0032	-.0550	-.1537
270.000		.9895							.5239						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0158	-.0305	-.0292
30.000	-.0473	-.0406	.0265
60.000	-.0386	-.0177	.2002
90.000	-.0937	-.0071	
120.000	-.1260	-.0382	-.0305
135.000	-.1260	-.0554	-.1037
150.000	-.1600	-.1231	-.1154

ARC11-716 IA14 OL+T12+S12N25 EXTERNAL TANK (RB1T50)

ALPHAT(1) = -0.510 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
165.000	-.1061	-.0802	-.1576
180.000	-.1690	-.0469	-.1783

ALPHAT(1) = -0.520 BETAT (4) = 4.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2300	.8274	.4235	-.0118	-.2744	-.3244	-.3825	-.3495	-.0004	.0824	-.0487	-.2194	-.2336	-.0528	.0012
30.000			.4096	-.0256	-.2820	-.3286	-.3802	-.3370	.0144	.0669	-.0980	-.2693	-.1792	-.0387	-.0176
60.000			.4306	-.0097	-.2810	-.3223	-.3897	-.2006	.0012	-.3104	-.5075	-.2034	-.1424	-.1616	-.0513
90.000		.8933	.4941	.0475	-.2447	-.2973	-.3691	-.0293	.5026		-.2837	-.3513	-.2015	-.1212	-.0694
120.000			.5965	.1371	-.1757	-.2366	-.3145	.0318	.1863	.3445	.1910	.1023	.0336	-.0619	-.2122
135.000								-.2459		.3720		.0661		-.1101	
150.000			.7084	.2308	-.1009	-.1649	-.2618	-.2220	.2543	.4033	.1185	-.0573	-.1173	-.2555	-.3028
165.000				.3045	-.0432	-.1146	-.2065	-.1693	.2570	.4293	.3352	.1506	.1072	-.0470	-.1916
180.000	1.2300	1.2330	.8314	.3474	-.0125	-.0831	-.1771	-.0936	.1958	.4174	.4301	.1337	.0785	-.1140	-.1874
270.000		1.0830							.5180						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0394	-.0426	-.0230
30.000	-.0505	-.0336	-.0124
60.000	-.0433	-.0182	.1771
90.000	-.0979	-.0654	
120.000	-.1127	-.0882	-.1149
135.000	-.1421	-.1011	-.1894
150.000	-.1608	-.1608	-.2100
165.000	-.1385	-.0956	-.2180
180.000	-.1502	-.1011	-.2744

ARC11-716 IA14 01+T12+S12N25 EXTERNAL TANK (RB1T50)

ALPHAT(1) = -8.550 BETAT (3) = 8.220

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1770	.7760	.3985	-.0312	-.2969	-.3487	-.4064	-.3715	-.0233	.0519	-.0865	-.2312	-.2323	-.0832	-.0183
30.000			.3664	-.0619	-.3110	-.3570	-.3902	-.3272	-.0114	.0768	-.1026	-.2633	-.1770	-.0479	-.0074
60.000			.3638	-.0595	-.3092	-.3552	-.3834	-.0959	-.0955	-.2380	-.4578	-.1852	-.0971	-.1086	-.0521
90.000		.7855	.3994	-.0280	-.2958	-.3450	-.2917	-.0959	.3899		-.3396	-.3729	-.1842	-.1505	-.0842
120.000			.4930	.0525	-.2438	-.3019	-.3718	.0093	.0614	.2960	.1403	.0697	-.0164	-.1321	-.2652
135.000								-.0103		.3514		.0248		-.1890	
150.000			.6160	.1573	-.1581	-.2253	-.3121	-.2753	.1811	.3055	.0994	-.1636	-.2128	-.3420	-.3755
165.000				.2565	-.0804	-.1508	-.2407	-.1962	.1880	.3410	.2607	.1343	.0739	-.1281	-.2697
180.000	1.1770	1.1370	.8079	.3264	-.0263	-.0986	-.1882	-.0583	.2004	.3386	.3833	.1353	.0413	-.1451	-.2450
270.000		1.1640							.5318						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0279	-.0483	-.0359
30.000	-.0548	-.0355	-.0449
60.000	-.0580	-.0183	.1441
90.000	-.1769	-.2049	
120.000	-.1388	-.1190	-.1449
135.000	-.1737	-.1164	-.2050
150.000	-.2006	-.1693	-.2387
165.000	-.1820	-.1156	-.2568
180.000	-.1959	-.1595	-.3073

ALPHAT(2) = -4.280 BETAT (1) = -8.180

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2320	.8920	.4998	.0543	-.2419	-.2957	-.3595	-.3381	-.0903	.0885	-.0796	-.2155	-.1893	-.1406	-.0546
30.000			.5968	.1342	-.1759	-.2398	-.3096	-.2820	.0084	-.1576	-.3409	-.1385	-.1152	-.1254	-.1042
60.000			.7182	.2413	-.0936	-.1596	-.2496	-.2084	.1850	-.2409	-.5065	-.2605	-.1810	.0269	.0086
90.000		1.2120	.8175	.3336	-.0215	-.0928	-.1836	.1980	.5915		-.5354	-.2506	-.2773	-.0647	-.0327
120.000			.8485	.3655	-.0002	-.0715	-.1618	-.1352	.4218	-.0037	-.2190	.2918	.2275	.1075	-.0346
135.000								-.1246		.1186		.2209		.1051	
150.000			.8202	.3362	-.0228	-.0933	-.1884	-.1406	.2384	.3936	.2347	.2273	.1164	-.0204	-.0644
165.000				.2804	-.0660	-.1350	-.2209	-.1863	.1123	.4573	.3431	.2146	.0751	-.0714	-.0964
180.000	1.2320	1.1390	.7063	.2277	-.0988	-.1551	-.2443	-.2278	.0872	.4546	.3174	.1487	.0176	-.0954	-.1762
270.000		.8387							.5667						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 OL+T12+S12N25 EXTERNAL TANK (RB1T50)

ALPHAT(2) = -4.260 BETAT (1) = -8.180

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0335	-.0569	.0022
30.000	-.0623	-.0343	.0341
60.000	-.0306	.0343	.1431
90.000	-.0658	.0076	
120.000	-.0895	.1092	.2786
135.000	-.0476	.1246	.2093
150.000	-.0715	.0764	.2532
165.000	-.0896	.0785	.0062
180.000	-.0686	.0603	-.0414

ALPHAT(2) = -4.260 BETAT (2) = -4.090

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2820	.9388	.5252	.0667	-.2280	-.2839	-.3464	-.3126	-.0721	.1516	-.0136	-.1821	-.2198	-.0820	.0145
30.000			.5774	.1125	-.1955	-.2569	-.3228	-.2874	-.0041	-.0163	-.2176	-.2174	-.0950	-.1044	-.0524
60.000			.6475	.1740	-.1480	-.2099	-.2900	-.2520	.1888	-.2318	-.4706	-.2225	-.1931	-.0486	.0054
90.000		1.1340	.7205	.2367	-.0979	-.1627	-.2462	-.0982	.5834		-.4993	-.2893	-.2767	-.0578	-.0540
120.000			.7664	.2786	-.0661	-.1338	-.2167	-.1694	.4223	.0659	-.1603	.1741	.1416	.0476	-.1084
135.000								-.1779		.2608		.1263		.0434	
150.000			.7764	.2829	-.0603	.1299	-.2220	-.1678	.2327	.4576	.1359	.1192	.0536	-.0644	-.1348
165.000				.2628	-.0766	-.1412	-.2289	-.1922	.1890	.4412	.3192	.1456	.0338	-.0503	-.1319
180.000	1.2820	1.1530	.7303	.2353	-.0924	-.1588	-.2361	-.2023	.1418	.3860	.3595	.0795	.0523	-.0426	-.1148
270.000		.9409							.6027						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0300	-.0435	-.0156
30.000	-.0490	-.0321	.0351
60.000	-.0300	.0155	.1198
90.000	-.0775	.0645	
120.000	-.1418	.0526	.1581
135.000	-.1020	.0594	.0896
150.000	-.1269	.0094	.1248
165.000	-.1327	.0269	-.0739
180.000	-.1184	.0100	-.1122

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T50)

ALPHAT(2) = -4.250 BETAT (3) = .020

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2990	.9514	.5309	.0752	-.2200	-.2773	-.3390	-.3025	-.1028	.1650	.0081	-.1705	-.2519	-.0629	.0265
30.000			.5399	.0789	-.2189	-.2742	-.3379	-.2991	.0195	.0918	-.1194	-.2187	-.1366	-.0728	-.0113
60.000			.5724	.1067	-.1956	-.2571	-.3294	-.2823	.1645	-.2035	-.4277	-.1745	-.0768	-.1390	-.0281
90.000		1.0440	.6221	.1569	-.1644	-.2262	-.3031	-.2435	.5807		-.4849	-.3255	-.1794	-.0774	-.0694
120.000			.6765	.1994	-.1284	-.1928	-.2707	-.2450	.2724	.1401	-.3802	.1176	.0412	-.0015	-.1503
135.000								-.2253		.3313		.0307		-.0249	
150.000			.7169	.2274	-.1030	-.1679	-.2552	-.2126	.2383	.3469	.1179	-.0251	-.0696	-.1294	-.2202
165.000				.2490	-.0904	-.1571	-.2406	-.2072	.2472	.3945	.2946	.1322	-.0270	-.0372	-.0671
180.000	1.2990	1.1580	.7407	.2590	-.0870	-.1548	-.2372	-.1793	.1494	.3697	.3840	.0752	-.0760	-.0414	-.1383
270.000		1.0410							.5879						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0101	-.0244	-.0079
30.000	-.0357	-.0294	.0086
60.000	-.0221	-.0012	.1440
90.000	-.0970	.0392	
120.000	-.1351	.0212	.0370
135.000	-.1239	.0169	-.0538
150.000	-.1510	-.0390	-.0570
165.000	-.1176	.0070	-.1239
180.000	-.1438	.0001	-.1050

ALPHAT(2) = -4.260 BETAT (4) = 4.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2800	.9321	.5211	.0645	-.2275	-.2818	-.3471	-.3147	-.0615	.1468	-.0071	-.1806	-.2285	-.0960	.0115
30.000			.4932	.0421	-.2459	-.2999	-.3565	-.3213	.0444	.1193	-.0707	-.2371	-.1742	-.0594	.0118
60.000			.4929	.0403	-.2456	-.2968	-.3648	-.3003	.1476	-.1422	-.3752	-.1166	-.0586	-.0765	-.0673
90.000		.9424	.5214	.0645	-.2283	-.2810	-.3526	.0023	.6071		-.4854	-.3612	-.1279	-.1472	-.0786
120.000			.5756	.1183	-.1966	-.2569	-.3258	-.1894	.1434	.2424	-.0354	.0502	-.0171	-.0505	-.1976
135.000								-.2743		.2054		-.0093		-.0947	
150.000			.6434	.1691	-.1549	-.2131	-.2995	-.2587	.1988	.3158	.0456	-.1356	-.1306	-.2458	-.3110
165.000				.2134	-.1148	-.1832	-.2664	-.2308	.2107	.3372	.2799	.0963	-.0441	-.0162	-.1810
180.000	1.2800	1.1530	.7308	.2435	-.0944	-.1604	-.2443	-.1639	.1468	.3358	.3765	.0711	-.0356	-.0868	-.1888
270.000		1.1290							.5836						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 OI+T12+S12N25 EXTERNAL TANK (RB1T50)

ALPHAT(2) = -4.260 BETAT (4) = 4.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0348	-.0465	-.0143
30.000	-.0271	-.0321	.0059
60.000	-.0537	-.0196	.1224
90.000	-.0750	-.0053	
120.000	-.0891	-.0351	-.0646
135.000	-.1200	-.0468	-.1466
150.000	-.1293	-.0918	-.1637
165.000	-.1187	-.0433	-.1764
180.000	-.1397	-.0417	-.2398

ALPHAT(2) = -4.270 BETAT (5) = 8.170

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2260	.8829	.4919	.0496	-.2394	-.2961	-.3609	-.3345	-.0979	.0824	-.0543	-.2022	-.2032	-.1460	-.0388
30.000			.4331	-.0025	-.2731	-.3272	-.3816	-.3390	.0350	.0956	-.0727	-.2689	-.2088	-.0811	.0210
60.000			.4132	-.0176	-.2931	-.3327	-.3708	-.2715	.1936	-.0942	-.3335	-.1210	-.0865	-.0518	-.0040
90.000		.8369	.4285	-.0041	-.2781	-.3285	-.3899	-.0405	.5355		-.4175	-.3976	-.1369	-.1779	-.0654
120.000			.4768	.0415	-.2520	-.3081	-.3714	-.0128	.0181	.2934	.0846	-.0140	-.0539	-.1281	-.2498
135.000								-.0280		.1009		-.0489		-.1723	
150.000			.5601	.1049	-.2013	-.2598	-.3436	-.2577	.1439	.2742	.0358	-.2150	-.1887	-.3430	-.3410
165.000				.1683	-.1469	-.2111	-.2935	-.2630	.1452	.2851	.1980	.0690	.0027	-.1356	-.2703
180.000	1.2260	1.0540	.7050	.2251	-.1072	-.1719	-.2567	-.1345	.1444	.2709	.3086	.0828	.0282	-.1619	-.2375
270.000		1.2100							.5939						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0246	-.0635	-.0007
30.000	-.0201	-.0340	-.0042
60.000	-.0480	-.0268	.1124
90.000	-.1416	-.0826	
120.000	-.1132	-.0497	-.0913
135.000	-.1480	-.0513	-.1471
150.000	-.1578	-.0917	-.1721
165.000	-.1507	-.0656	-.1675
180.000	-.1834	-.0831	-.2675

ARC11-716 IA14 01+T12+S12N25 EXTERNAL TANK (RB1T50)

ALPHAT(3) = -.550 BETAT (1) = -8.200

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2500	.9814	.5891	.1251	-.1879	-.2471	-.3172	-.2901	-.1431	.1141	-.0440	-.1658	-.1698	-.1577	-.0882
30.000			.6898	.2111	-.1149	-.1801	-.2565	-.2282	.0817	-.0698	-.2690	-.1083	-.0850	-.0959	-.1012
60.000			.7850	.2994	-.0513	-.1163	-.2075	-.1392	.3016	-.1441	-.3484	-.1644	-.1363	-.0529	.0199
90.000		1.2290	.8286	.3421	-.0177	-.0882	-.1769	.1508	.6129		-.4545	-.4382	-.2443	-.1255	-.0298
120.000			.8033	.3178	-.0369	-.1092	-.1923	-.1680	.3313	-.0973	-.1595	-.0324	.2588	.1568	.0110
135.000								-.1842		-.0385		.0189		.1430	
150.000			.7393	.2569	-.0878	-.1528	-.2393	-.2007	.1498	.1709	.1792	.0337	.1327	.0072	-.0444
165.000				.1955	-.1353	-.1993	-.2779	-.2421	.0453	.3764	.3100	.1644	.0721	-.0397	-.0758
180.000	1.2500	1.0600	.6207	.1482	-.1663	-.2263	-.2967	-.2730	.0953	.3891	.2878	.1152	-.1320	-.0184	-.0993
270.000		.8530							.6602						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0345	-.0255	-.0137
30.000	-.0391	.0075	.0343
60.000	-.0020	.0879	.1472
90.000	-.0324	.0599	
120.000	-.0319	.1612	.3504
135.000	-.0026	.1726	.2665
150.000	-.0168	.1374	.3120
165.000	-.0192	.1401	.0369
180.000	-.0072	.1203	.0030

ALPHAT(3) = -.550 BETAT (2) = -4.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.5000	1.0290	.6154	.1426	-.1759	-.2352	-.3077	-.2741	-.1871	.1876	.0173	-.1494	-.1932	-.1122	-.0328
30.000			.6642	.1858	-.1412	-.2066	-.2806	-.2460	.0681	.0683	-.1670	-.1603	-.0850	-.0759	-.0444
60.000			.7072	.2209	-.1108	-.1746	-.2585	-.2015	.2988	-.1195	-.3294	-.1721	-.0409	-.0860	-.0313
90.000		1.1490	.7317	.2454	-.0937	-.1612	-.2423	-.1646	.6051		-.4466	-.4429	-.2945	-.1075	-.0585
120.000			.7209	.2362	-.0995	-.1688	-.2450	-.1951	.3382	-.0410	-.1232	-.1058	.1359	.0774	-.0609
135.000								-.2086		.1013		.0818		.0705	
150.000			.6974	.2127	-.1181	-.1851	-.2667	-.2187	.1900	.3590	.1406	.0006	-.0171	-.0492	-.1035
165.000				.1860	-.1420	-.2045	-.2818	-.2463	.1517	.3959	.2660	.1425	-.1055	-.0439	-.1064
180.000	1.5000	1.0740	.6381	.1617	-.1565	-.2179	-.2882	-.2463	.0987	.3033	.3117	.0769	-.2603	-.0063	-.1142
270.000		.9598							.6407						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 OL+712+512N25 EXTERNAL TANK (RB1T50)

ALPHAT(3) = -.550 BETAT (2) = -4.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0127	-.0230	-.0163
30.000	-.0337	-.0113	.0216
60.000	.0003	.0448	.1107
90.000	-.0401	.0841	
120.000	-.0889	.1133	.2584
135.000	-.0625	.1146	.1919
150.000	-.3744	.0769	.2478
165.000	-.0630	.0905	-.0214
180.000	-.0625	.0746	-.0301

ALPHAT(3) = -.520 BETAT (3) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3130	1.0410	.6203	.1486	-.1670	-.2293	-.2990	-.2664	-.1807	.2072	.0411	-.1456	-.2056	-.0835	.0127
30.000			.6212	.1464	-.1681	-.2298	-.2977	-.2659	.0857	.1224	-.0828	-.1668	-.1358	-.0702	.0071
60.000			.6230	.1499	-.1647	-.2245	-.3071	-.2667	.2788	-.0832	-.2775	-.2000	-.0278	-.0343	-.0442
90.000		1.0560	.6305	.1583	-.1605	-.2206	-.2974	-.2545	.5138		-.4559	-.4049	-.2903	-.1325	-.0911
120.000			.6371	.1646	-.1547	-.2167	-.2911	-.2431	.3672	.0238	-.0585	-.1515	.0250	.0100	-.1002
135.000								-.2548		.2205		-.1485		.0108	
150.000			.6460	.1686	-.1521	-.2133	-.2965	-.2482	.1827	.3603	.0599	-.1076	-.1510	-.0317	-.1691
165.000				.1672	-.1510	-.2106	-.2922	-.2548	.1685	.3374	.2864	.0636	-.1403	-.0030	-.1060
180.000	1.3130	1.0740	6484	.1678	-.1518	-.2146	-.2901	-.2275	.1179	.3224	.3462	.0485	-.1449	.0571	-.1039
270.000		1.0590							.6204						

X/LT	.7460	.8530	.9280
PHI			
.000	.0054	-.0086	.0036
30.000	-.0028	-.0078	.0232
60.000	-.0316	.0129	.0787
90.000	-.0536	.0656	
120.000	-.1055	.0735	.1350
135.000	-.0821	.0677	.0368
150.000	-.1102	.0159	.0203
165.000	-.0820	.0523	-.0712
180.000	-.0509	.0528	-.0680

ARC11-715 IA14 O8+T12+S12N25 EXTERNAL TANK (RB1T50)

ALPHAT(3) = -.520 BETAT (4) = 4.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0030	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2970	1.0210	.6098	.1425	-.1717	-.2345	-.3071	-.2770	-.1672	.1784	.0223	-.1434	-.1872	-.1188	-.0054
30.000			.5615	.0956	-.2034	-.2644	-.3270	-.2955	.0644	.1617	-.0446	-.1840	-.1919	-.07[illegible]	-.0038
60.000			.5359	.0718	-.2217	-.2746	-.3486	-.2966	.1931	-.0295	-.2393	-.2141	-.0451	-.0 24	-.0225
90.000		.9553	.5292	.0705	-.2212	-.2767	-.3460	-.1102	.6361		-.4626	-.3240	-.2922	-.1378	-.1003
120.000			.5461	.0340	-.2131	-.2707	-.3380	-.3037	.1682	.0935	-.0361	-.1226	-.0488	-.0467	-.1521
135.000								-.2971		.2616		-.1405		-.0707	
150.000			.5833	.1127	-.1942	-.2515	-.3324	-.2854	.1453	.2019	.0532	-.2210	-.2330	-.1349	-.2457
165.000				.1435	-.1722	-.2348	-.3123	-.2753	.1644	.3014	.2292	.0584	-.1201	-.0100	-.1186
180.000	1.2970	1.0710	.6424	.1662	-.1563	-.2196	-.2963	-.2094	.1287	.2744	.3336	.0555	-.1580	-.0390	-.1575
270.000		1.1900							.6146						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0136	-.0360	-.0146
30.000	-.0061	-.0222	.0178
60.000	-.0205	.0026	.1000
90.000	-.0282	.0381	
120.000	-.0576	.0151	.0075
135.000	-.0751	.0029	-.0968
150.000	-.0897	-.0312	-.1144
165.000	-.0751	.0065	-.1402
180.000	-.0921	.0112	-.2059

ALPHAT(3) = -.540 BETAT (5) = 8.180

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2460	.9727	.5758	.1178	-.1904	-.2519	-.3216	-.2958	-.1257	.0794	-.0512	-.1551	-.1706	-.1783	-.0637
30.000			.4880	.0434	-.2444	-.3012	-.3632	-.3338	.0565	.1106	-.0736	-.2324	-.2015	-.0972	-.0063
60.000			.4443	.0036	-.2703	-.3200	-.3871	-.3298	.1256	.0179	-.2073	-.1951	-.0996	-.0527	.0048
90.000		.8511	.4326	-.0049	-.2764	-.3239	-.3863	-.0530	.6382		-.4599	-.0218	-.1423	-.0745	-.0574
120.000			.4533	.0142	-.2662	-.3184	-.3808	-.0418	-.0301	.1505	-.0288	-.0132	-.0924	-.0870	-.1878
135.000								-.0535		.0839		-.1111		-.1368	
150.000			.5076	.0516	-.2431	-.2930	-.3709	-.1708	.1032	.2190	-.0224	-.2818	-.2231	-.2590	-.2725
165.000				.0979	-.2075	-.2640	-.3388	-.3048	.1159	.2405	.1684	.0160	-.0788	-.1423	-.2142
180.000	1.2460	.9679	.6181	.1398	-.1745	-.2339	-.3096	-.1968	.1048	.2141	.2556	.0371	-.0490	-.1855	-.2062
270.000		1.2340							.6226						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 OL+T12+S12N25 EXTERNAL TANK (RB1T50)

ALPHAT(3) = -.560 BETAT (5) = 0.180

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	-.0207	-.0480	-.0209
30.000	.0009	-.0286	.0033
60.000	-.0220	-.0294	.1532
90.000	-.0867	-.0957	
120.000	-.0662	.0020	-.0334
135.000	-.0971	.0920	-.1074
150.000	-.1068	-.0411	-.1395
165.000	-.0946	-.0121	-.1640
180.000	-.1292	-.0246	-.2403

ALPHAT(4) = 3.970 BETAT (1) = -8.220

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2190	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2340	1.0750	.6926	.2178	-.1131	-.1806	-.2544	-.2302	-.1098	.1377	-.0065	-.0945	-.1332	-.1037	-.0890
30.000			.6028	.3166	-.0364	-.1081	-.1900	-.1573	.1555	.0316	-.1657	-.0777	-.0279	-.0399	-.0478
60.000			.8547	.3638	.0042	-.0664	-.1661	-.1152	.4212	-.0359	-.2020	-.1201	.0307	.0330	.0118
90.000		1.2180	.6256	.3417	-.0173	-.0902	-.1791	.1974	.5910		-.3487	-.2254	-.0207	-.1398	-.1475
120.000			.7281	.2510	-.0893	-.1555	-.2395	-.2042	.1986	-.2303	-.3490	-.3143	.1343	.2002	.1076
135.000								-.2450		-.1677		-.0883		.1601	
150.000			.6290	.1571	-.1592	-.2228	-.3045	-.2665	.0274	-.0975	.1570	-.1311	-.0965	.0303	.0312
165.000				.0976	-.2089	-.2737	-.3424	-.3028	-.0253	.2813	.2861	.1313	-.1027	.0263	.0058
180.000	1.2340	.9501	.9085	.0616	-.2364	-.2901	-.3551	-.3015	.0788	.3347	.2835	.0906	-.3276	-.0496	-.0421
270.000		.8334							.6251						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0227	.0122	-.0152
30.000	-.0229	.0683	.0293
60.000	.0130	.1136	.1099
90.000	-.0761	-.0190	
120.000	.0428	.3053	.4080
135.000	.0732	.2977	.3208
150.000	.0559	.2459	.3823
165.000	.0665	.2404	.0674
180.000	.0728	.1937	.0050

ARC11-716 IA14 01+T12+S12N25 EXTERNAL TANK (RB1T50)

ALPHAT(4) = 3.980 BETAT (2) = -4.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2830	1.1280	.7257	.2358	-.0980	-.1625	-.2407	-.2128	-.1512	.2353	.0592	-.0955	-.1318	-.0634	-.0305
30.000			.7668	.2745	-.0672	-.1374	-.2148	-.1826	.1790	.1444	-.0756	-.0808	-.0775	-.0399	-.0145
60.000			.7660	.2737	-.0656	-.1319	-.2258	-.1767	.3908	-.0023	-.1704	-.1516	.0093	.0031	-.0076
90.000		1.1310	.7215	.2413	-.0954	-.1612	-.2462	-.0855	.5783		-.3847	-.2531	.0079	-.0428	-.0729
120.000			.6517	.1813	-.1436	-.2083	-.2855	-.2615	.2012	-.1868	-.3287	-.2937	.0433	.1087	.0188
135.000								-.2681		-.0360		-.1642		.0849	
150.000			.5925	.1274	-.1857	-.2436	-.3229	-.2752	.1090	.1347	.1389	-.1313	-.1125	-.0028	-.0246
165.000				.0915	-.2118	-.2702	-.3401	-.3007	.1117	.2948	.2647	.1292	-.1555	-.0239	-.0200
180.000	1.2830	.9604	.5283	.0681	-.2220	-.2778	-.3449	-.2524	.0550	.2192	.3156	.0874	-.2612	.0420	-.0917
270.000		.9431							.6294						

X/LT	.7460	.8530	.9280
PHI			
.000	.0047	.0073	.0365
30.000	.0050	.0335	.0484
60.000	.0100	.0739	.1094
90.000	-.0275	.0929	
120.000	-.0192	.2169	.2999
135.000	.0015	.2047	.2241
150.000	-.0118	.1675	.2769
165.000	.0129	.1794	.0045
180.000	.0316	.1501	-.0120

ALPHAT(4) = 4.030 BETAT (3) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3010	1.1450	.7318	.2412	-.0898	-.1562	-.2368	-.2095	-.1472	.2735	.0899	-.1007	-.1213	-.0567	-.0148
30.000			.7741	.2273	-.1027	-.1703	-.2457	-.2172	-.0129	.2286	-.0227	-.1053	-.0928	-.0540	-.0103
60.000			.6740	.1945	-.1323	-.1936	-.2795	-.2307	.3145	.0438	-.1585	-.1120	-.0235	-.0292	-.0185
90.000		1.0400	.6227	.1574	-.1634	-.2253	-.3029	-.0895	.5780		-.4226	-.2203	-.0326	-.0806	-.0811
120.000			.5760	.1089	-.1969	-.2546	-.3239	-.2865	.2068	-.1248	-.2905	-.2657	.0013	.0417	-.0370
135.000								-.2788		.0713		-.2647		.0375	
150.000			.5523	.0867	-.2127	-.2693	-.3459	-.2857	.1502	.2785	.0814	-.1569	-.2126	-.0201	-.0892
165.000				.0795	-.2213	-.2740	-.3443	-.3035	.1254	.2496	.2773	.0632	-.1623	.0001	-.0423
180.000	1.3010	.9592	.5362	.0769	-.2195	-.2751	-.3432	-.2568	.0913	.2364	.3254	.0563	-.1995	.0706	-.0866
270.000		1.0430							.5940						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T50)

ALPHAT(4) = 4.030 BETAT (3) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	.0168	.0158	.0382
30.000	.0107	.0235	.0479
60.000	-.0034	.0478	.1121
90.000	-.0314	.0826	
120.000	-.0343	.1484	.1750
135.000	-.0237	.1429	.0960
150.000	-.0472	.0974	.1005
165.000	-.0012	.1259	-.0505
180.000	.0049	.1243	-.0526

ALPHAT(4) = 4.020 BETAT (4) = 4.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2890	1.1250	.7179	.2327	-.1001	-.1643	-.2437	-.2170	-.1486	.2227	.0655	-.0926	-.1349	-.0744	-.0383
30.000			.6477	.1716	-.1483	-.2133	-.2835	-.2590	.0691	.1920	.0049	-.1451	-.1116	-.0803	-.0322
60.000			.5782	.1146	-.1983	-.2549	-.3311	-.2648	.3185	.0883	-.1605	-.0760	-.0514	-.0666	-.0308
90.000		.9454	.5269	.0684	-.2253	-.2822	-.3537	-.0193	.6140		-.4390	-.1317	-.0543	-.0900	-.0791
120.000			.4989	.0456	-.2425	-.2950	-.3619	-.2986	.1652	-.0625	-.2128	-.1820	-.0573	-.0292	-.0756
135.000								-.3194		.1638		-.2321		-.0399	
150.000			.5037	.0475	-.2424	-.2935	-.3665	-.3151	.0790	.2528	.0727	-.2685	-.2870	-.0764	-.1535
165.000				.0582	-.2345	-.2874	-.3595	-.3207	.1020	.2603	.2126	.0317	-.1689	.0017	-.0367
180.000	1.2890	.9636	.5335	.0585	-.2238	-.2801	-.3526	-.2680	.0798	.2259	.3118	.0542	-.2027	.0508	-.0559
270.000		1.1390							.5989						

X/LT	.7460	.8530	.9280
PHI			
.000	.0022	.0041	.0377
30.000	.0084	.0060	.0428
60.000	-.0002	.0145	.1010
90.000	-.0084	.0555	
120.000	-.0026	.0835	.0399
135.000	-.0148	.0751	-.0534
150.000	-.0374	.0377	-.0662
165.000	-.0129	.0732	-.1077
180.000	-.0241	.0798	-.1793

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T50)

ALPHAT(4) = 4.060 BETAT (5) = 8.250

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2360	1.0770	.6907	.2156	-.1109	-.1763	-.2551	-.2332	-.0881	.0876	.0055	-.0896	-.1459	-.1188	-.0844
30.000			.5664	.1066	-.1947	-.2570	-.3271	-.3053	.0724	.1594	-.0231	-.1754	-.1368	-.1044	-.0452
60.000			.4746	.0264	-.2549	-.3072	-.3741	-.3186	.2070	.1488	-.1371	-.0864	-.0741	-.0958	-.0289
90.000		.8341	.4291	-.0088	-.2787	-.3305	-.3917	-.0346	.6459		-.4172	-.0516	-.0556	-.0753	-.0518
120.000			.4175	-.0175	-.2847	-.3339	-.3919	-.1378	.0644	.0114	-.1941	-.1196	-.1135	-.0710	-.0982
135.000								-.1808		.1488		-.2078		-.0950	
150.000			.4404	-.0085	-.2763	-.3256	-.3975	-.2117	.0429	.1371	.0079	-.3201	-.2997	-.1513	-.1750
165.000				.0208	-.2604	-.3167	-.3837	-.3305	.0635	.1991	.1668	-.0186	-.1965	-.0844	-.1468
180.000	1.2360	.8665	.5099	.0498	-.2402	-.2975	-.3699	-.2994	.0889	.1737	.2245	.0049	-.2627	-.1164	-.1265
270.000		1.2190							.6038						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0134	-.0014	-.0060
30.000	.0302	.0018	.0206
60.000	.0028	.0063	.1070
90.000	.0004	.0543	
120.000	-.0006	.0614	.0228
135.000	-.0270	.0556	-.0787
150.000	-.0547	.0111	-.1230
165.000	-.0203	.0387	-.1350
180.000	-.0529	.0408	-.2355

ALPHAT(5) = 8.150 BETAT (1) = -8.190

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1920	1.1590	.7923	.3170	-.0387	-.1081	-.1939	-.1666	-.0396	.1534	.0444	-.0377	-.0570	-.0544	-.0529
30.000			.8996	.4137	.0410	-.0359	-.1257	-.0895	.2759	.1177	-.0917	.0027	.0185	.0077	.0056
60.000			.9017	.4169	.0447	-.0272	-.1310	-.0701	.5048	.0588	-.1376	-.0142	.0479	.0562	.0414
90.000		1.1720	.7985	.3257	-.0324	-.1036	-.1942	.2362	.5329		-.3401	-.1735	-.0282	.0547	.0997
120.000			.6413	.1785	-.1492	-.2117	-.2904	-.1627	.0336	-.2228	-.3316	-.2377	-.0196	.0971	.1200
135.000								-.3024		-.2874		-.2319		.1191	
150.000			.5229	.0694	-.2316	-.2900	-.3664	-.3359	-.1047	-.1578	-.0060	-.1424	-.0946	.0178	.0586
165.000				.0096	-.2749	-.3330	-.3986	-.3439	-.0414	.2133	.2297	.1045	-.1024	.0139	.0525
180.000	1.1920	.8479	.4145	-.0229	-.2959	-.3435	-.3973	-.3516	.0294	.2651	.2688	.0584	-.3216	-.0405	.0196
270.000		.7894							.5472						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (R81T50)

ALPHAT(5) = 8.150 BETAT (1) = -8.190

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0347	.0340	.0281
30.000	.0154	.1086	.0953
60.000	.0604	.1531	.1535
90.000	.1214	.1653	
120.000	.1306	.3056	.3174
135.000	.1553	.3135	.2848
150.000	.1327	.2476	.3701
165.000	.1388	.2377	.0596
180.000	.1155	.1914	-.0016

ALPHAT(5) = 8.100 BETAT (2) = -4.070

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2390	1.2100	.8257	.3389	-.0191	-.0925	-.1764	-.1480	-.0968	.2842	.1127	-.0369	-.0404	-.0214	-.0170
30.000			.8554	.3644	.0005	-.0716	-.1575	-.1254	.2496	.2140	-.0047	-.0101	.0089	.0014	.0022
60.000			.8067	.3181	-.0335	-.1020	-.1961	-.1260	.4958	.0899	-.1388	.0185	.0344	.0224	.0009
90.000		1.0850	.6957	.2224	-.1096	-.1769	-.2608	.0584	.5175		-.3495	-.1272	-.0058	.0245	.0046
120.000			.5745	.1164	-.1965	-.2556	-.3296	-.2670	.0417	-.2559	-.3581	-.2550	.0006	.0815	.0701
135.000								-.3248		-.1527		-.2700		.0754	
150.000			.4957	.0458	-.2506	-.3041	-.3734	-.3260	-.0259	.0753	.0351	-.2201	-.1548	.0145	.0134
165.000				.0089	-.2739	-.3274	-.3840	-.3285	.0894	.2439	.2561	.0935	-.2057	.0116	.0275
180.000	1.2390	.8560	.4309	-.0115	-.2792	-.3326	-.3888	-.1862	.0081	.2180	.2858	.0418	-.2448	.0391	-.0002
270.000		.8971							.5293						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0018	.0312	.0547
30.000	.0203	.0648	.0645
60.000	.0248	.0992	.1006
90.000	.0275	.0910	
120.000	.0542	.2677	.2899
135.000	.0699	.2558	.2256
150.000	.0575	.2044	.2934
165.000	.0831	.2115	.0105
180.000	.0738	.1792	-.0100

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T50)

ALPHAT(5) = 8.010 BETAT (3) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2580	1.2240	.8313	.3416	-.0164	-.0863	-.1760	-.1447	-.0897	.3249	.1394	-.0408	-.0462	-.0090	.0002
30.000			.7941	.3092	-.0443	-.1152	-.1957	-.1662	-.0586	.2846	.0380	-.0510	-.0452	-.0184	-.0032
60.000			.7045	.2248	-.1085	-.1742	-.2614	-.1891	.4735	.1279	-.1131	-.0489	-.0090	.0055	.0010
90.000		.9934	.5965	.1333	-.1820	-.2429	-.3212	-.1675	.5090		-.3359	-.1786	.0251	.0207	-.0056
120.000			.5074	.0572	-.2376	-.2946	-.3648	-.3133	.0773	-.1397	-.3466	-.2513	-.0224	.0366	.0087
135.000								-.3205		-.0386		-.2797		.0297	
150.000			.4639	.0168	-.2633	-.3124	-.3808	-.3207	.1311	.1848	.0820	-.2480	-.2162	-.0030	-.0434
165.000				.0056	-.2725	-.3205	-.3866	-.2971	.0463	.2011	.2459	.0379	-.1350	.0098	.0137
180.000	1.2580	.8555	.4404	-.0028	-.2717	-.3259	-.3856	-.2016	.0501	.1921	.3160	.0570	-.2167	.0581	.0105
270.000		1.0000							.5192						

X/LT	.7460	.8530	.9280
PHI			
.000	.0161	.0437	.0783
30.000	.0193	.0514	.0778
60.000	.0206	.0681	.1056
90.000	.0214	.1073	
120.000	.0450	.1789	.1334
135.000	.0466	.1722	.0691
150.000	.0170	.1293	.0797
165.000	.0575	.1568	-.0164
180.000	.0623	.1538	-.0350

ALPHAT(5) = 8.100 BETAT (4) = 4.160

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2410	1.2050	.8167	.3331	-.0248	-.0952	-.1797	-.1541	-.0922	.2634	.1197	-.0393	-.0458	-.0208	-.0253
30.000			.7164	.2409	-.0964	-.1644	-.2426	-.2168	.0859	.2658	.0554	-.0792	-.0762	-.0641	-.0533
60.000			.5984	.1340	-.1835	-.2418	-.3226	-.2751	.2891	.1876	-.0768	-.0444	-.0746	-.0371	-.0234
90.000		.8945	.4985	.0508	-.2483	-.3011	-.3367	-.1658	.5175		-.3536	-.3799	-.0010	-.0154	-.0141
120.000			.4385	-.0014	-.2805	-.3284	-.3898	-.2907	.0655	-.1327	-.3335	-.2205	-.0328	.0091	-.0143
135.000								-.3320		.1216		-.2930		-.0010	
150.000			.4224	-.0182	-.2865	-.3333	-.4004	-.3360	.0500	.2410	.0591	-.2652	-.2562	-.0373	-.0894
165.000				-.0145	-.2879	-.3339	-.3980	-.3482	.0437	.2600	.1980	-.0096	-.2048	.0000	.0478
180.000	1.2410	.8486	.4366	-.0111	-.2824	-.3328	-.3959	-.3119	.0389	.1792	.3134	.0514	-.1984	.0729	.0168
270.000		1.0910							.5273						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T50)

ALPHAT(5) = 0.100 BETAT (4) = 4.160

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0031	.0284	.0601
30.000	-.0026	.0086	.0786
60.000	.0158	.0381	.1613
90.000	.0250	.1102	
120.000	.0388	.1279	.0345
135.000	.0354	.1105	-.0488
150.000	-.0018	.0698	-.0464
165.000	.0445	.1048	-.1072
180.000	.0413	.1085	-.1814

ALPHAT(5) = 8.080 BETAT (5) = 8.310

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.1920	1.1560	.7872	.3143	-.0342	-.1071	-.1965	-.1670	.0035	.1059	.0458	-.0426	-.0635	-.0594	-.0635
30.000			.6245	.1700	-.1548	-.2174	-.2914	-.2719	.0859	.2203	.0355	-.0993	-.1030	-.1097	-.1002
60.000			.4847	.0460	-.2554	-.3102	-.3463	-.3059	.1945	.2039	-.0259	-.0638	-.1065	-.0746	-.0419
90.000		.7841	.3976	-.0331	-.3008	-.3498	-.3428	-.1655	.5066		-.3585	-.4096	-.0505	-.0688	-.0440
120.000			.3649	-.0609	-.3160	-.3595	-.4103	-.1335	.0457	-.1255	-.3180	-.1330	-.0749	-.0158	-.0442
135.000								-.2148		.1252		-.2679		-.0339	
150.000			.3691	-.0564	-.3141	-.3572	-.4182	-.2185	.0254	.1986	.0131	-.3128	-.2587	-.0928	-.1140
165.000				-.0468	-.3081	-.3582	-.4196	-.1636	.0341	.1684	.1586	-.0424	-.1951	-.0454	-.0530
180.000	1.1920	.7509	.4168	-.0303	-.2966	-.3501	-.4148	-.3649	.0708	.1288	.1586	-.0172	-.1929	-.0744	-.0682
270.000		1.1780							.5406						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0511	.0304	.0273
30.000	.0298	-.0072	.0482
60.000	.0359	.0	.1395
90.000	-.0002	.0836	
120.000	.0348	.0963	.0123
135.000	.0253	.0891	-.0715
150.000	-.0163	.0362	-.1120
165.000	.0344	.0668	-.1253
180.000	.0140	.0583	-.2291

ARC11-716 IA14 01+T12+S12N25 EXTERNAL TANK (RB1T51) (14 FEB 74)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES
LREF = 38.7090 INCHES YMRP = .0000 INCHES
BREF = 38.7090 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 1.400 ELEVON = .000
RUDDER = .000 SPOBRK = .000

ALPHAT(1) = -8.500 BETAT (1) = -8.220

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2470	.7985	4259	.0163	-.2261	-.2696	-.3224	-.3069	-.1128	.0533	-.0490	-.1850	-.1827	-.1550	-.0807
30.000			.5121	.0924	-.1774	-.2297	-.2877	-.2829	-.0960	-.2053	-.3925	-.2221	-.1302	-.1483	-.1343
60.000			.6557	.2172	-.0842	-.1424	-.2236	-.2049	.0760	-.2905	-.5085	-.3792	-.2591	-.0165	-.0124
90.000		1.2070	.8179	.3520	.0244	-.0410	-.1280	-.1091	.6097		-.4851	-.0974	-.1590	-.1488	-.0595
120.000			.9222	.4463	.0964	.0266	-.0615	-.0393	.5606	.1930	-.0958	.3798	.2915	.1965	.0324
135.000								-.0301		.2301		.2681		.1956	
150.000			.9365	.4565	.1049	.0372	-.0620	-.0209	.2502	.4348	.3304	.2369	.2129	.0835	.0208
165.000				.4131	.0721	.0030	-.0834	-.0612	-.0326	.4910	.4454	.3149	.2012	.0593	.0199
180.000	1.2470	1.2590	.8318	.3618	.0335	-.0299	-.1089	-.0987	-.0095	.4434	.4372	.2912	.0491	.0150	-.0563
270.000		.8028							.3627						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0292	-.0674	-.0533
30.000	-.0883	-.0808	.0347
60.000	-.0618	-.0699	.1076
90.000	-.1328	-.1179	
120.000	-.0195	.1030	.2116
135.000	.0086	.0593	.0769
150.000	-.0381	-.0068	.0702
165.000	-.0732	-.0153	-.0388
180.000	-.1299	-.0291	-.0807

ALPHAT(1) = -8.460 BETAT (2) = -4.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2920	.8403	.4520	.0277	-.2131	-.2548	-.3097	-.2843	-.1701	.0935	.0164	-.1370	-.2264	-.1449	.0056
30.000			.4948	.0669	-.1900	-.2406	-.2950	-.2772	-.0473	-.1045	-.2213	-.2192	-.1445	-.1117	-.0677
60.000			.5895	.1422	-.1353	-.1902	-.2636	-.2408	.0588	-.2914	-.4668	-.3866	-.2571	-.0839	-.0580
90.000		1.1170	.7160	.2569	-.0525	-.1135	-.1922	-.1705	.5862		-.4316	-.1308	-.2158	-.2129	-.0984
120.000			.8259	.3504	.0224	-.0446	-.1256	-.1118	.3113	.2482	-.0483	.3015	.1882	.1263	-.0387
135.000								-.0865		.3581		.1866		.1240	
150.000			.8808	.3944	.0562	-.0085	-.1044	-.0690	.2274	.4149	.2899	.1841	.1156	.0249	-.0465

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T51)

ALPHAT(1) = -8.460 BETAT (2) = -4.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
165.000				.3938	.0546	-.0130	-.1003	-.0770	-.0208	.4373	.4554	.2751	.0805	.0362	-.0147
180.000	1.2920	1.2690	.8533	.3669	.0407	-.0284	-.1079	-.0980	-.0171	.4089	.4776	.2363	-.0815	.0704	-.1087
270.000		.9043							.5167						

X/LT	.7460	.8530	.9280
PHI			
.000	.0001	-.0237	-.0124
30.000	-.0286	-.0309	.0325
60.000	-.0338	-.0150	.1666
90.000	-.0617	.0231	
120.000	-.0822	.0512	.1261
135.000	-.0622	.0106	.0332
150.000	-.1201	-.0523	.0169
165.000	-.0892	-.0281	-.0786
180.000	-.1231	-.0694	-.1219

ALPHAT(1) = -8.440 BETAT (3) = -.010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3100	.8552	.4607	.0370	-.2058	-.2523	-.3025	-.2764	-.1482	.0973	.0323	-.1214	-.2241	-.1531	.0103
30.000			.4721	.0506	-.2003	-.2473	-.2991	-.2755	-.0652	-.0498	-.1215	-.2051	-.1454	-.1202	-.0333
60.000			.5227	.0952	-.1725	-.2239	-.2911	-.2654	-.0081	-.2713	-.4742	-.3572	-.1165	-.0471	-.0613
90.000		1.0130	.6120	.1749	-.1179	-.1744	-.2433	-.2200	.5837		-.3162	-.1766	-.2486	-.1239	-.0932
120.000			.7240	.2700	-.0455	-.1097	-.1830	-.1689	.2279	.3505	.0276	.2199	.1231	.0614	-.0793
135.000								-.1349		.3445		.1501		.0538	
150.000			.6130	.3362	.0084	-.0561	-.1421	-.1167	.1053	.4790	.1991	.0695	.0048	-.0375	-.1292
165.000				.3697	.0338	-.0291	-.1145	-.0962	-.0324	.5176	.4078	.2667	.0187	.0205	-.0763
180.000	1.3100	1.2750	.8596	.3767	.0429	-.0247	-.1060	-.0847	-.0044	.4021	.4890	.2018	.0990	.0660	-.0374
270.000		1.0110							.5785						

X/LT	.7460	.8530	.9280
PHI			
.000	.0199	-.0126	.0131
30.000	-.0104	-.0188	.0237
60.000	-.0231	-.0145	.1744
90.000	-.0615	.0040	
120.000	-.1246	-.0212	.0186
135.000	-.1391	-.0435	-.0776
150.000	-.1627	-.1021	-.1032

ARC11-716 IA14 01+T12+S12N25 EXTERNAL TANK (RB1T51)

ALPHAT(1) = -8.440 BETAT (3) = -.010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
165.000	-.1684	-.0456	-.0700
180.000	-.1058	-.0352	-.1616

ALPHAT(1) = -8.550 BETAT (4) = 4.130

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2980	.8418	.4544	.0379	-.2113	-.2570	-.3057	-.2815	-.1576	.0766	-.0033	-.1274	-.2277	-.1412	.0003
30.000			.4414	.0266	-.2170	-.2616	-.3057	-.2794	-.0242	.0337	-.0448	-.1977	-.1639	-.1242	-.0011
60.000			.4574	.0365	-.2097	-.2507	-.3116	-.2748	-.0909	-.2348	-.4661	-.2643	-.0687	-.0910	-.0803
90.000		.9116	.5150	.0903	-.1738	-.2238	-.2882	-.0998	.5494		-.2499	-.2181	-.2723	-.0864	-.0917
120.000			.6181	.1841	-.1140	-.1698	-.2374	-.2202	.1564	.4462	.1002	.1582	.0754	.0274	-.1244
135.000								-.1847		.1639		.1092		-.0029	
150.000			.7306	.2717	-.0438	-.1000	-.1861	-.1569	.2243	.3661	.1930	-.0186	-.0676	-.0836	-.2240
165.000				.3385	.0130	-.0529	-.1343	-.1150	-.0401	.3746	.3668	.2160	.0733	.0567	-.0659
180.000	1.2980	1.2750	.8557	.3794	.0426	-.0229	-.1046	-.0665	.0720	.3495	.4460	.1846	.0640	.0368	-.0740
270.000		1.1170							.5920						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0069	-.0247	-.0148
30.000	-.0160	-.0304	.0203
60.000	-.0279	-.0268	.1736
90.000	-.0692	-.0579	
120.000	-.1484	-.0932	-.0700
135.000	-.1595	-.1103	-.1583
150.000	-.2102	-.1689	-.1946
165.000	-.1493	-.1002	-.1648
180.000	-.1453	-.1009	-.2022

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T51)

ALPHAT(1) = -8.580 BETAT (5) = 8.260

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2490	.7976	.4192	1136	-.2307	-.2734	-.3273	-.3066	-.1277	.0478	-.0320	-.1816	-.1882	-.1881	-.0572
30.000			.3812	-.0147	-.2414	-.2827	-.3282	-.2949	-.0243	.0483	-.0513	-.2201	-.2276	-.1149	-.0322
60.000			.3826	-.0186	-.2446	-.2839	-.3345	-.1111	-.0738	-.1951	-.4178	-.2245	-.0812	-.0842	-.0768
90.000		.8098	.4240	.0127	-.2307	-.2741	-.3301	-.0549	.4401		-.1775	-.2636	-.2429	-.1511	-.0842
120.000			.5179	.0958	-.1773	-.2312	-.2949	-.2276	.0850	.3568	.1957	.0765	.0252	-.0257	-.2008
135.000								-.2447		.1870		.0635		-.0662	
150.000			.6454	.1972	-.0987	-.1546	-.2361	-.2166	.1798	.3185	.1606	-.1086	-.1053	-.2205	-.2913
165.000				.2929	-.0223	-.0859	-.1675	-.1475	.0313	.3088	.2710	.2037	.1218	.0037	-.1453
180.000	1.2490	1.1820	.8336	.3603	.0279	-.0378	-.1208	-.0446	.1342	.2859	.3621	.1740	.1218	-.0426	-.1215
270.000		1.2090							.6050						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0238	-.0636	-.0519
30.000	-.0451	-.0655	-.0251
60.000	-.0676	-.0678	.1351
90.000	-.1569	-.2272	
120.000	-.2018	-.1579	-.1205
135.000	-.2184	-.1653	-.1960
150.000	-.2457	-.2045	-.2450
165.000	-.1976	-.1595	-.2064
180.000	-.2226	-.1911	-.2676

ALPHAT(2) = -4.350 BETAT (1) = -8.220

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2980	.9082	.5256	.0995	-.1731	-.2204	-.2801	-.2646	-.2211	.1080	.0035	-.1489	-.1734	-.1614	-.0812
30.000			.6216	.1799	-.1104	-.1710	-.2342	-.2198	-.0478	-.0831	-.3069	-.2283	-.0769	-.0979	-.1304
60.000			.7430	.2813	-.0316	-.0911	-.1755	-.1526	.2056	-.1312	-.3941	-.2487	-.2255	-.0227	.0355
90.000		1.2470	.8411	.3640	.0357	-.0306	-.1147	-.0940	.6349		-.4307	-.2860	-.1725	-.0951	-.0238
120.000			.9750	.3927	.0581	-.0100	-.0949	-.0822	.3890	.1123	-.2243	.2702	.2505	.2059	.0418
135.000								-.0841		.1455		.1364		.1940	
150.000			.8452	.3672	.0359	-.0317	-.1190	-.0917	.1446	.2320	.2172	.1133	.1532	.0731	.0277
165.000				.3179	-.0044	-.0702	-.1507	-.1277	-.0960	.3925	.4010	.3011	.0694	.0429	.0169
180.000	1.2980	1.1700	.7319	.2715	-.0420	-.1001	-.1705	-.1598	-.0720	.3582	.4060	.2731	-.0884	.0346	-.0828
270.000		.8506							.5472						

X/LT	.7480	.8530	.9280
PHI			

ARC11-716 IA14 OI+Y12+S12N25 EXTERNAL TANK (RB1T51)

ALPHAT(2) = -4.350 BETAT (1) = -6.220

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0390	-.0574	-.0347
30.000	-.0705	-.0574	.0283
60.000	-.0230	-.0019	.1732
90.000	-.0310	.0241	
120.000	-.0126	.1221	.2818
135.000	.0100	.0761	.1711
150.000	-.0380	.0147	.1800
165.000	-.0670	.0163	.0000
180.000	-.1391	-.0016	-.0610

ALPHAT(2) = -4.350 BETAT (2) = -4.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3450	.9467	.5497	.1083	-.1653	-.2124	-.2715	-.2472	-.1905	.1428	.0650	-.1077	-.1932	-.1339	-.0105
30.000			.5978	.1539	-.1355	-.1898	-.2494	-.2314	-.0755	-.0223	-.1739	-.1772	-.0728	-.0739	-.0736
60.000			.6688	.2145	-.0908	-.1468	-.2183	-.1962	.1661	-.1263	-.3887	-.2411	-.1022	-.0825	.0068
90.000		1.1580	.7440	.2766	-.0388	-.1033	-.1810	-.1576	.6257		-.4310	-.2381	-.2258	-.0284	-.0517
120.000			.7872	.3176	-.0089	-.0736	-.1535	-.1330	.3903	.1416	-.1709	.2348	.1553	.1213	-.0241
135.000								-.1284		.2297		.0502		.1229	
150.000			.7973	.3226	-.0055	-.0684	-.1567	-.1213	.0718	.3863	.2324	.1030	.0609	.0059	-.0218
165.000				.3059	-.0191	-.0813	-.1604	-.1390	-.0752	.3658	.4120	.2728	.0058	.0213	-.0116
180.000	1.3450	1.1810	.7485	.2811	-.0330	-.0956	-.1689	-.1553	-.0380	.3154	.4223	.2148	-.1316	-.0086	-.0167
270.000		.9521							.6092						

X/LT	.7460	.8530	.9280
PHI			
.000	.0103	-.0137	.0057
30.000	-.0367	-.0188	.0614
60.000	-.0079	.0036	.1584
90.000	-.0497	.0545	
120.000	-.0741	.0644	.1948
135.000	-.0572	.0144	.1158
150.000	-.1137	-.0429	.1266
165.000	-.0888	-.0116	-.0266
180.000	-.0588	-.0533	-.1035

ARC11-716 IA14 OI+T12+S12N25 EXTERNAL TANK (RB1T51)

ALPHAT(2) = -4.190 BETAT (3) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3690	.9652	.5539	.1159	-.1588	-.2090	-.2636	-.2429	-.1819	.1422	.0741	-.0988	-.1854	-.1262	-.0028
30.000			.5619	.1237	-.1493	-.2015	-.2604	-.2409	-.0474	.0445	-.0708	-.1442	-.1426	-.0843	-.0386
60.000			.5897	.1472	-.1310	-.1815	-.2524	-.2280	.1186	-.1022	-.3654	-.2585	-.0465	-.0876	-.0655
90.000		1.0610	.6399	.1907	-.1006	-.1589	-.2317	-.2080	.6193		-.4221	-.1930	-.2616	-.0109	-.0625
120.000			.6884	.2352	-.0687	-.1267	-.2011	-.1876	.1692	.1963	-.1326	.1791	.0759	.0276	-.0552
135.000								-.1695		.3268		.0181		.0308	
150.000			.7345	.2671	-.0458	-.1029	-.1857	-.1538	.1518	.2684	.2335	-.0087	-.0757	-.0411	-.1278
165.000				.2799	-.0388	-.0959	-.1742	-.1508	-.0814	.3741	.3446	.1970	-.0498	-.0206	-.0481
180.000	1.3650	1.1810	.7553	.2826	-.0340	-.0946	-.1712	-.1451	.0142	.3102	.4179	.1688	.0125	.0430	-.0488
270.000		1.0630							.6151						

X/LT	.7480	.8530	.9280
PHI			
.000	.0287	.0045	.0169
30.000	-.0001	-.0091	.0385
60.000	.0029	.0045	.1770
90.000	-.0504	.0349	
120.000	-.1216	.0190	.0924
135.000	-.1554	-.0164	-.0105
150.000	-.1898	-.0638	-.0356
165.000	-.0976	-.0445	-.0717
180.000	-.1335	-.0126	-.0760

ALPHAT(2) = -4.320 BETAT (4) = 4.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3480	.9520	.5463	.1144	- 1630	-.2105	-.2709	-.2510	-.1925	.1244	.0467	-.1049	-.1974	-.1401	-.0139
30.000			.5210	.0891	-.1778	-.2264	-.2768	-.2562	-.0138	.0312	-.0054	-.1367	-.2298	-.1038	-.0169
60.000			.5164	.0861	-.1744	-.2237	-.2873	-.2542	.1167	-.0700	-.3207	-.2261	-.0597	-.0365	-.0799
90.000		.9569	.5431	.1087	-.1605	-.2123	-.2744	-.2454	.6160		-.4219	-.1976	-.2892	-.0432	-.0922
120.000			.5952	.1586	-.1294	-.1848	-.2503	-.2289	.1048	.2819	-.0575	.1302	.0080	-.0211	-.1072
135.000								-.2093		.1320		.0388		-.0273	
150.000			.6658	.2093	-.0911	-.1446	-.2247	-.1960	.1840	.2798	.1540	-.1149	-.1680	-.0843	-.1875
165.000				.2535	-.0550	-.1163	-.1914	-.1709	.0685	.3154	.2934	.1391	.0119	.0147	-.0910
180.000	1.3480	1.1830	.7479	.2811	-.0320	-.0956	-.1723	-.1327	.0485	.2908	.3862	.1430	-.0055	.0207	-.0838
270.000		1.1630							.6250						

X/LT	.7480	.8530	.9280
PHI			

ARC11-716 IA14 01+712+S12N25 EXTERNAL TANK (RB175I)

ALPHAT(2) = -4.320 BETAT (4) = 4.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7480	.8530	.9280
PHI			
.000	.0048	-.0189	.0030
30.000	.0055	-.0132	.0446
60.000	-.0372	-.0279	.1415
90.000	-.0748	-.0348	
120.000	-.1487	-.0514	-.0152
135.000	-.1586	-.0613	-.1077
150.000	-.2023	-.0981	-.1307
165.000	-.1367	-.0737	-.1395
180.000	-.1558	-.0794	-.1738

ALPHAT(2) = -4.370 BETAT (5) = 8.230

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5090	.5580	.6380
PHI															
.000	1.2970	.9023	.5178	.0921	-.1788	-.2287	-.2873	- 2721	-.2125	.0720	.0066	-.1331	-.1832	-.1653	-.0816
30.000			.4614	.0401	-.2106	-.2596	-.3059	-.2813	-.0052	.0355	-.0378	-.1762	-.2385	-.1276	-.0321
60.000			.4441	.0224	-.2190	-.2605	-.3146	-.2599	.1133	-.0244	-.2644	-.1160	-.0838	-.0597	-.0424
90.000		.8512	.4546	.0351	-.2131	-.2583	-.3111	-.0410	.5134		-.4136	-.2468	-.1688	-.0786	-.0908
120.000			.5018	.0794	-.1845	-.2324	-.2941	-.2523	.0468	.3446	.0131	.0477	-.0558	-.0530	-.1921
135.000								-.2585		.0258		.0155		-.0887	
150.000			.5853	.1437	-.1404	-.1911	-.2649	-.2401	.1345	.2310	.0888	-.1700	-.1950	-.1620	-.2852
165.000				.2125	-.0848	-.1468	-.2190	-.2017	.1080	.2462	.2267	.1564	.0026	-.0238	-.1
180.000	1.2970	1.0820	.7297	.2622	-.0476	-.1100	-.1838	-.1222	.0901	.2210	.3263	.1607	-.0369	-.0850	-.1
270.000		1.2500							.5507						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0381	-.0571	-.0313
30.000	-.0148	-.0364	.0021
60.000	-.0473	-.0571	.1389
90.000	-.1909	-.1713	
120.000	-.1813	-.0916	-.0707
135.000	-.2023	-.1105	-.1345
150.000	-.2231	-.1356	-.1598
165.000	-.1913	-.1234	-.1787
180.000	-.2293	-.1642	-.2226

ARC11-716 IA14 O8+T12+S12N25 EXTERNAL TANK (RB1T51)

ALPHAT(3) = -.580 BETAT (1) = -8.280

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3100	.9937	.6061	.1620	-.1245	-.1795	-.2461	-.2289	-.1954	.1246	.0264	-.1131	-.1286	-.1480	-.1047
30.000			.7143	.2534	-.0541	-.1156	-.1860	-.1733	.0150	.0110	-.2413	-.1547	-.0493	-.0892	-.0847
60.000			.8114	.3336	.0098	-.0549	-.1408	-.1154	.3062	-.0323	-.2812	-.1912	-.0735	-.0809	.0214
90.000		1.2890	.8552	.3762	.0418	-.0251	-.1113	-.0918	.6451		-.3605	-.3554	-.1931	-.1690	-.0402
120.000			.8261	.3509	.0217	-.0468	-.1262	-.1164	.3219	.0083	-.2021	-.1240	.2403	.2168	.0658
135.000								-.1304		.0449		.0680		.1901	
150.000			.7595	.2923	-.0268	-.0901	-.1724	-.1464	.1198	.0566	.1083	.0288	.0511	.0680	.0350
165.000				.2316	-.0737	-.1359	-.2093	-.1876	-.1448	.2830	.3713	.2801	.0605	.0420	.0240
180.000	1.3100	1.0340	.6963	.1880	-.1078	-.1619	-.2259	-.2171	-.1052	.2942	.3485	.2321	-.1534	-.0459	-.0754
270.000		.8562							.6310						

X/LT	.7480	.8530	.9280
PHI			
.000	-.0616	-.0574	-.0270
30.000	-.0899	-.0352	.0207
60.000	.0091	.0263	.1620
90.000	-.0159	.0467	
120.000	.0059	.1657	.3817
135.000	.0307	.1512	.3024
150.000	-.0210	.0976	.3258
165.000	-.0535	.0907	.0918
180.000	-.1035	.0661	.0319

ALPHAT(3) = -.570 BETAT (2) = -4.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
000	1.3590	1.0410	.6545	.1777	-.1152	-.1692	-.2353	-.2198	-.1657	.1770	.0680	-.0794	-.1434	-.1338	-.0456
30.000			.6854	.2247	-.0818	-.1416	-.2098	-.1942	-.0390	.0654	-.1117	-.1114	-.0762	-.0534	-.0617
60.000			.7294	.2644	-.0509	-.1130	-.1935	-.1657	.3018	-.0181	-.2746	-.1938	-.0290	-.0378	-.0511
90.000		1.1780	.7525	.2848	-.0353	-.0970	-.1753	-.1561	.6296		-.3691	-.3500	-.2033	-.1173	-.0618
120.000			.7416	.2746	-.0416	-.1049	-.1794	-.1634	.2536	.0321	-.1189	-.1365	.1431	.1181	.0086
135.000								-.1673		.1426		.0070		.1046	
150.000			.7141	.2497	-.0626	-.1222	-.1974	-.1703	-.0155	.2537	.1264	.0240	-.0192	-.0175	-.0042
165.000				.2218	-.0850	-.1432	-.2114	-.1857	-.0859	.2666	.3244	.2660	-.0039	-.0713	-.0114
180.000	1.3590	1.0910	.6545	.1979	-.1019	-.1565	-.2221	-.2043	.0748	.2185	.0547	.2127	-.1455	-.1283	-.0285
270.000		.9654							.6336						

X/LT	.7480	.8530	.9260
PHI			

ARC11-716 *A14 O1+T12+S12N25 EXTERNAL TANK (RB1T51)

ALPHAT(3) = -.570 BETAT (2) = -4.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0006	-.0070	.0089
30.000	-.0260	-.0105	.0510
60.000	.0031	.0270	.1506
90.000	-.0372	.0768	
120.000	-.0487	.1216	.2779
135.000	-.0326	.0864	.1847
150.000	-.0795	.0380	.2279
165.000	-.0791	.0480	.0153
180.000	-.0674	.0528	-.0492

ALPHAT(3) = -.560 BETAT (3) = .000

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3790	1.0600	.6417	.1893	-.1054	-.1645	-.2293	-.2095	-.1556	.1808	.1102	-.0650	-.1410	-.1258	-.0248
30.000			.6451	.1897	-.1070	-.1634	-.2225	-.2040	-.0267	.0121	.0031	-.0814	-.1456	-.0618	-.0228
60.000			.6437	.1897	-.1025	-.1544	-.2282	-.2079	.1490	.0114	-.2459	-.2172	-.0176	-.0153	-.0487
90.000		1.0750	.6494	.1992	-.0975	-.1498	-.2223	-.2029	.6322		-.3739	-.3457	-.2188	-.0895	-.0879
120.000			.6525	.2027	-.0961	-.1521	-.2159	-.1995	.2335	.0900	-.0777	-.1558	.0740	.0245	-.0248
135.000								-.1947		.2293		-.0731		.0208	
150.000			.6639	.2036	-.0919	-.1489	-.2273	-.1844	.0806	.2735	.1590	-.0206	-.1350	-.0847	-.0895
165.000				.2049	-.0939	-.1498	-.2225	-.1960	-.0664	.2890	.3195	.1599	-.0680	-.0840	-.0407
180.000	1.3790	1.0900	.6603	.2047	-.0930	-.1519	-.2207	-.1892	.0296	.2808	.3551	.1554	-.0300	-.2315	-.0317
270.000		1.0800							.6197						

X/LT	.7460	.8530	.9280
PHI			
.000	.0201	.0171	.0429
30.000	.0075	.0049	.0555
60.000	-.0248	.0045	.1238
90.000	-.0354	.0555	
120.000	-.0874	.0717	.1738
135.000	-.0929	.0495	.0678
150.000	-.1435	.0020	.0386
165.000	-.0817	.0422	-.0202
180.000	-.1060	.0347	-.0044

ARC11-716 IA14 01+T12+S12N25 EXTERNAL TANK (RB1T51)

ALPHAT(3) = -.570 BETAT (4) = 4.110

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3650	1.0440	.6337	.1833	-.1050	-.1606	-.2254	-.2108	-.1636	.1685	.0869	-.0702	-.1462	-.1415	-.0420
30.000			.5871	.1400	-.1348	-.1902	-.2469	-.2265	-.0216	.0321	.0330	-.0780	-.1832	-.0968	-.0267
60.000			.5603	.1186	-.1454	-.1997	-.2638	-.2363	.0584	.0531	-.1996	-.2252	-.0235	-.0371	-.0168
90.000		.9767	.5536	.1189	-.1494	-.2037	-.2649	-.2391	.6471		-.3700	-.3065	-.2271	-.1287	-.0985
120.000			.5677	.1311	-.1433	-.1956	-.2558	-.2353	.0967	.1505	-.0241	-.1575	.0191	-.0455	-.0550
135.000								-.2253		.2233		-.0389		-.0567	
150.000			.6079	.1563	-.1257	-.1798	-.2501	-.2145	.1480	.1452	.1404	-.1448	-.2062	-.1411	-.1557
165.000				.1830	-.1056	-.1608	-.2318	-.2095	.1095	.2771	.2535	.1312	-.0277	-.1099	-.0206
180.000	1.3650	1.0950	.6608	.2029	-.0896	-.1464	-.2174	-.1789	.0361	.2309	.3490	.1401	-.0454	-.1053	-.0672
270.000		1.1750							.6382						

X/LT	.7460	.8530	.9280
PHI			
.000	.0026	-.0053	.0126
30.000	.0046	.0027	.0570
60.000	-.0100	-.0037	.1496
90.000	-.0509	.0127	
120.000	-.1011	.0057	.0584
135.000	-.1057	-.0037	-.0525
150.000	-.1446	-.0348	-.0743
165.000	-.0851	-.0027	-.0880
180.000	-.1061	-.0091	-.1380

ALPHAT(3) = -.580 BETAT (5) = 8.220

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3200	.9991	.6076	.1652	-.1201	-.1815	-.2444	-.2316	-.1875	.1172	.0282	-.1115	-.1455	-.1456	-.0957
30.000			.5213	.0928	-.1746	-.2308	-.2855	-.2633	.0240	-.0198	-.0905	-.1657	-.2510	-.1192	-.0346
60.000			.4775	.0525	-.1996	-.2451	-.3047	-.2723	.0184	.0941	-.1414	-.2201	-.0395	-.0703	-.0268
90.000		.8696	.4653	.0407	-.2030	-.2476	-.3027	-.2725	.6706		-.3673	-.2324	-.2596	-.1383	-.0962
120.000			.4833	.0601	-.1939	-.2401	-.2965	-.2756	-.0225	.1971	.0361	-.1161	-.0459	-.1049	-.1303
135.000								-.2664		.0424		-.0656		-.1199	
150.000			.5336	.0976	-.1714	-.2189	-.2875	-.2600	.0984	.2209	.0593	-.2016	-.2644	-.1692	-.2502
165.000				.1447	-.1362	-.1915	-.2592	-.2411	.1133	.2039	.2124	.1078	-.0550	-.0969	-.1435
180.000	1.3200	1.0070	.6402	.1847	-.1055	-.1617	-.2339	-.1857	.0686	.1691	.2632	.1672	-.1178	-.0452	-.1142
270.000		1.2720							.6590						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T51)

ALPHAT(3) = -.580 BETAT (5) = 8.220

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0511	-.0495	-.0227
30.000	-.0135	-.0229	.0111
60.000	-.0234	-.0348	.1959
90.000	-.0835	-.0256	
120.000	-.1317	-.0323	.0012
135.000	-.1499	-.0514	-.0822
150.000	-.1771	-.0751	-.1027
165.000	-.1341	-.0710	-.1432
180.000	-.1997	-.0983	-.2043

ALPHAT(4) = 4.090 BETAT (1) = -8.230

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3000	1.1050	.7147	.2619	-.0547	-.1137	-.1848	-.1697	-.1385	.0895	.0550	-.0626	-.0898	-.0851	-.0786
30.000			.8239	.3518	.0216	-.0451	-.1214	-.1071	.1252	.1091	-.1422	-.0702	-.0040	.0027	-.0359
60.000			.8782	.3931	.0579	-.0079	-.0991	-.0773	.4319	.0774	-.1839	-.1265	.0396	.0509	.0139
90.000		1.2530	.8474	.3702	.0383	-.0316	-.1157	-.0984	.6364		-.3056	-.2002	-.0397	-.0809	-.1431
120.000			.7480	.2852	-.0328	-.0950	-.1729	-.1584	.2155	-.1310	-.2934	-.3365	.0691	.1600	.1325
135.000								-.1890		-.0854		-.1484		.1094	
150.000			.6483	.1956	-.1005	-.1550	-.2342	-.2085	-.0022	-.0667	.1124	-.0764	-.0786	.0061	.0698
165.000				.1305	-.1477	-.2015	-.2685	-.2489	-.1370	.2036	.2891	.2205	.0228	-.0600	.0473
180.000	1.3000	.9683	.5286	.0980	-.1755	-.2228	-.2808	-.2585	-.0939	.2392	.3188	.2159	-.1766	-.1463	-.0062
270.000		.8441							.6395						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0826	-.0450	-.0293
30.000	-.0353	.0004	.0156
60.000	.0030	.0612	.1100
90.000	-.1136	-.0541	
120.000	.0757	.2293	.4966
135.000	.1031	.2502	.4182
150.000	.0598	.2223	.4484
165.000	.0319	.2130	.1530
180.000	.0042	.1701	.0629

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T51)

ALPHAT(4) = 4.110 BETAT (2) = -4.040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3480	1.1550	.7447	.2768	-.0356	-.0958	-.1702	-.1576	-.1192	.2284	.1332	-.0241	-.0820	-.0753	-.0162
30.000			.7874	.3136	-.0099	-.0721	-.1451	-.1292	-.0326	.0902	-.0058	-.0347	-.0382	-.0020	-.0132
60.000			.7864	.3111	-.0069	-.0696	-.1548	-.1334	.0563	.1098	-.1755	-.1394	.0496	.0404	-.0061
90.000		1.1580	.7420	.2793	-.0350	-.1005	-.1777	-.1589	.5172		-.3145	-.2087	-.0011	-.0382	-.0991
120.000			.6677	.2121	-.0892	-.1459	-.2129	-.2001	.1552	-.1137	-.2699	-.3320	-.0071	.0848	.0704
135.000								-.2124		-.0012		-.0999		.0239	
150.000			.6089	.1594	-.1269	-.1810	-.2483	-.2231	-.0163	.1198	.1205	-.0737	-.1357	-.0705	.0122
165.000				.1273	-.1517	-.2045	-.2665	-.2398	.0278	.2106	.3003	.2542	-.0421	-.1220	-.0175
180.000	1.3480	.9733	.5444	.1065	-.1646	-.2122	-.2700	-.2441	.0474	.1606	.3195	.1963	-.0979	-.2065	-.0425
270.000		.9506							.6129						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0279	.0100	.0496
30.000	-.0100	.0251	.0622
60.000	-.0068	.0560	.0868
90.000	-.0794	.0102	
120.000	.0067	.1696	.3970
135.000	.0312	.1721	.3105
150.000	-.0013	.1453	.3423
165.000	.0070	.1587	.0852
180.000	-.0015	.1353	.0635

ALPHAT(4) = 4.110 BETAT (3) = .040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3700	1.1740	.7569	.2844	-.0337	-.0938	-.1708	-.1509	-.1086	.2249	.1569	-.0071	-.0830	-.0757	-.0086
30.000			.7351	.2691	-.0452	-.1080	-.1776	-.1603	-.0727	.1565	.0523	-.0477	-.0731	-.0411	-.0182
60.000			.6939	.2291	-.0714	-.1308	-.2035	-.1834	.2273	.1413	-.1842	-.1079	.0180	.0009	-.0313
90.000		1.0590	.6393	.1866	-.1043	-.1597	-.2260	-.2093	.6096		-.3588	-.2331	-.0039	-.0462	-.0733
120.000			.5883	.1454	-.1335	-.1852	-.2468	-.2294	.1176	-.0510	-.2437	-.2679	-.0005	.0178	.0155
135.000								-.2322		.1153		-.1499		-.0175	
150.000			.5679	.1242	-.1490	-.1986	-.2692	-.2269	.0859	.2276	.1268	-.0768	-.1827	-.1306	-.0127
165.000				.1203	-.1569	-.2067	-.2703	-.2443	.1084	.2000	.2864	.1514	-.0365	-.1540	.0159
180.000	1.3700	.9749	.5526	.1149	-.1554	-.2098	-.2715	-.2345	.0542	.1925	.3142	.1562	-.0667	-.2807	.0343
270.000		1.0700							.6167						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T51)

ALPHAT(4) = 4.110 BETAT (3) = .040

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0047	.0276	.0401
30.000	.0033	.0282	.0808
60.000	-.0022	.0360	.1452
90.000	-.0462	.0637	
120.000	-.0261	.1354	.2127
135.000	-.0199	.1275	.1329
150.000	-.0571	.0902	.1199
165.000	-.0136	.1151	.0204
180.000	.0136	.1113	.0122

ALPHAT(4) = 4.090 BETAT (4) = 4.170

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3490	1.1500	.7439	.2807	-.0399	-.0962	-.1721	-.1549	-.1140	.1744	.1312	-.0255	-.0911	-.0898	-.0164
30.000			.6712	.2123	-.0855	-.1445	-.2068	-.1944	-.1309	.1433	.0543	-.0764	-.1221	-.0677	-.0300
60.000			.5971	.1525	-.1307	-.1834	-.2527	-.2159	.1774	.1639	-.1418	-.1165	.0005	-.0306	-.0378
90.000		.9570	.5431	.1093	-.1603	-.2114	-.2710	-.2468	.6142		-.3456	-.1851	.0154	-.0656	-.0707
120.000			.5163	.0865	-.1754	-.2218	-.2795	-.2523	.1165	-.0015	-.1804	-.2316	-.0235	-.0562	-.0181
135.000								-.2507		.1557		-.0937		-.0907	
150.000			.5240	.0886	-.1727	-.2218	-.2863	-.2468	.0940	.1765	.1405	-.1503	-.2464	-.1891	-.0799
165.000				.1020	-.1686	-.2152	-.2767	-.2519	.0965	.2296	.2202	.0956	-.0815	-.1914	.0351
180.000	1.3490	.9752	.5527	.1132	-.1592	-.2114	-.2708	-.2315	.0362	.1682	.3068	.1587	-.0843	-.1797	-.0075
270.000		1.1690							.6228						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0185	.0040	.0414
30.000	-.0093	.0085	.0629
60.000	-.0075	.0087	.1362
90.000	-.0321	.0414	
120.000	-.0293	.0744	.0873
135.000	-.0296	.0652	-.0131
150.000	-.0696	.0353	-.0314
165.000	-.0171	.0627	-.0563
180.000	-.0300	.0656	-.1087

ARC11-716 IA14 01+T12+S12N25 EXTERNAL TANK (RB1T51)

ALPHAT(4) = 4.080 BETAT (5) = 8.280

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3010	1.1070	.7165	.2633	-.0493	-.1126	-.1843	-.1726	-.1422	.1046	.0531	-.0656	-.0959	-.1055	-.0758
30.000			.5919	.1561	-.1334	-.1874	-.2512	-.2367	-.0410	.1058	-.0582	-.1178	-.1461	-.1030	-.0638
60.000			.5013	.0727	-.1852	-.2334	-.2987	-.2756	.0292	.2280	-.0728	-.1304	-.0313	-.0550	-.0482
90.000		.8508	.4533	.0338	-.2073	-.2548	-.3111	-.2326	.6339		-.3291	-.1127	.0547	-.0767	-.0478
120.000			.4419	.0256	-.2172	-.2584	-.3118	-.2834	.0457	.0654	-.1129	-.1987	-.0354	-.1019	-.0719
135.000								-.2804		.1302		-.1076		-.1223	
150.000			.4658	.0395	-.2086	-.2541	-.3157	-.2774	.0610	.0781	.0827	-.1987	-.2958	-.1841	-.1861
165.000				.0652	-.1926	-.2406	-.3038	-.2797	.0654	.1790	.1936	.0743	-.1014	-.1311	-.0914
180.000	1.3010	.8937	.5287	.0921	-.1719	-.2237	-.2896	-.2468	.0243	.1411	.2020	.1090	-.1590	-.0937	-.0994
270.000		1.2550							.6414						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0797	-.0435	-.0180
30.000	-.0292	-.0183	.0287
60.000	-.0333	-.0178	.1715
90.000	-.0742	.0202	
120.000	-.0537	.0399	.0491
135.000	-.0650	.0321	-.0377
150.000	-.1168	.0012	-.0666
165.000	-.0540	.0156	-.1037
180.000	-.0868	.0037	-.1523

ALPHAT(5) = 8.150 BETAT (1) = -8.220

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.2530	1.1900	.8127	.3486	.0187	-.0457	-.1231	-.1077	-.0823	.0701	.0943	-.0040	-.0243	-.0226	-.0264
30.000			.9204	.4411	.0955	.0226	-.0597	-.0389	.2365	.1801	-.0541	-.0023	.0492	.0453	.0305
60.000			.9229	.4422	.0987	.0307	-.0661	-.0421	.4731	.1700	-.1609	-.0197	.0644	.0793	0591
90.000		1.2040	.8182	.3543	.0279	-.0403	-.1244	-.0983	.6011		-.2937	-.1253	-.0198	.0582	.1173
120.000			.6617	.2187	-.0805	-.1404	-.2151	-.2011	.0754	-.2801	-.3156	-.2363	-.0484	.0717	.1219
135.000								-.2447		-.2218		-.2575		.1045	
150.000			.5393	.1139	-.1623	-.2137	-.2871	-.2678	-.0966	-.2043	-.0027	-.0954	-.0946	.0089	.0774
165.000				.0494	-.2081	-.2543	-.3172	-.2918	-.0747	.1443	.1893	.1621	-.0065	-.0411	.0509
180.000	1.2530	.8564	.4350	.0255	-.2257	-.2687	-.3222	-.2801	-.0313	.1477	.2675	.1334	-.1874	-.1279	.0197
270.000		.8002							.5200						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 O1+T12+S12N25 EXTERNAL TANK (RB1T51)

ALPHAT(5) = 8.150 BETAT (1) = -8.220

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0490	-.0463	-.0019
30.000	.0186	.0440	.0658
60.000	.0523	.1210	.1554
90.000	.1032	.1583	
120.000	.1046	.2869	.4097
135.000	.1485	.2878	.3692
150.000	.1074	.2455	.4395
165.000	.0942	.2272	.1479
180.000	.0774	.1904	.0480

ALPHAT(5) = 8.170 BETAT (2) = -4.100

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3020	1.2450	.8479	.3636	.0371	-.0297	-.1102	-.0952	-.0662	.2518	.1784	.0339	-.0173	-.0049	.0131
30.000			.8776	.3945	.0588	-.0146	-.0903	-.0746	-.0069	.2171	.0492	-.0032	.0336	.0320	.0329
60.000			.8265	.3504	.0215	-.0433	-.1298	-.1087	.3864	.1961	-.1890	-.0253	.0860	.0640	.0313
90.000		1.1090	.7140	.2594	-.0506	-.1149	-.1886	-.1746	.5892		-.2912	-.0885	.0114	.0313	.0480
120.000			.5877	.1504	-.1327	-.1879	-.2545	-.2386	.0441	-.2840	-.3154	-.2594	-.0252	.0497	.0841
135.000								-.2627		-.1696		-.2218		.0241	
150.000			.5085	.0800	-.1817	-.2329	-.2962	-.2702	-.0584	-.0166	.0596	-.1598	-.1352	-.0638	.0364
165.000				.0464	-.2045	-.2521	-.3097	-.2753	-.0116	.1798	.2797	.2074	-.0912	-.1038	.0328
180.000	1.3020	.8633	.4515	.0319	-.2154	-.2594	-.3115	-.2622	-.0026	.1585	.2909	.1442	-.1257	-.2134	.0500
270.000		.9105							.5539						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0155	.0121	.0615
30.000	.0137	.0442	.0932
60.000	.0073	.0808	.1224
90.000	.0183	.0977	
120.000	.0500	.2393	.3495
135.000	.0698	.2334	.2932
150.000	.0476	.1972	.3474
165.000	.0651	.2032	.0882
180.000	.0767	.1784	.0599

ARC11-716 IA14 01+T12+S12N25 EXTERNAL TANK (RB1T51)

ALPHAT(5) = 8.160 BETAT (3) = .010

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3210	1.2580	.8587	.3727	.0411	-.0261	-.1086	-.0920	-.0556	.2415	.2227	.0545	-.0196	-.0131	.0271
30.000			.8143	.3406	.0166	-.0498	-.1275	-.1071	-.0707	.2153	.1236	-.0012	-.0161	-.0066	.0104
60.000			.7206	.2623	-.0476	-.1048	-.1843	-.1512	.3431	.2260	-.1624	-.0355	.0362	.0330	.0037
90.000		1.0090	.6094	.1703	-.1157	-.1694	-.2412	-.2065	.5743		-.2879	-.2134	.0443	.0202	.0223
120.000			.5224	.0959	-.1729	-.2210	-.2782	-.2642	.0301	-.2433	-.2950	-.2700	-.0379	.0182	.0472
135.000								-.2662		-.0085		-.1869		-.0176	
150.000			.4838	.0568	-.1963	-.2445	-.3013	-.2614	.0825	.1203	.1068	-.1687	-.2084	-.1070	.0242
165.000				.0488	-.2051	-.2528	-.3086	-.2724	.0686	.1478	.2598	.1146	-.0529	-.1407	.0469
180.000	1.3210	.8621	.4609	.0450	-.2051	-.2532	-.3065	-.2553	.0518	.1455	.3202	.1516	-.0852	-.2885	.0492
270.000		1.0200							.5927						

X/LT	.7460	.8530	.9280
PHI			
.000	.0071	.0279	.0749
30.000	.0061	.0423	.1014
60.000	.0036	.0649	.1603
90.000	.0201	.1270	
120.000	.0343	.1740	.1735
135.000	.0396	.1652	.1267
150.000	.0133	.1275	.1283
165.000	.0647	.1542	.0461
180.000	.0615	.1521	.0344

ALPHAT(5) = 8.160 BETAT (4) = 4.200

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0080	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6380
PHI															
.000	1.3050	1.2410	.8451	.3693	.0369	-.0304	-.1098	-.0921	-.0594	.1991	.1742	.0343	-.0265	-.0161	.0092
30.000			.7430	.2831	-.0306	-.0958	-.1646	-.1515	-.1129	.2210	.1045	-.0244	-.0454	-.0424	-.0208
60.000			.6198	.1805	-.1141	-.1693	-.2423	-.2199	.1551	.2785	-.1086	-.0009	-.0078	-.0069	-.0197
90.000		.9086	.5143	.0927	-.1727	-.2259	-.2851	-.2149	.5758		-.3056	-.2832	-.0002	-.0119	.0083
120.000			.4585	.0419	-.2038	-.2492	-.3086	-.2842	.0174	-.1729	-.2939	-.2535	-.0348	-.0153	.0264
135.000								-.2771		.0615		-.1761		-.0571	
150.000			.4510	.0266	-.2113	-.2532	-.3143	-.2697	.0615	.1697	.1038	-.1641	-.2438	-.1181	-.0199
165.000				.0337	-.2135	-.2532	-.3120	-.2780	.0571	.2198	.2057	.0551	-.1401	-.1287	.0737
180.000	1.3050	.8637	.4598	.0400	-.2061	-.2517	-.3093	-.2796	.0281	.1343	.3065	.1510	-.0864	-.1718	.0485
270.000		1.1270							.5938						

X/LT	.7460	.8530	.9280
PHI			

ARC11-716 IA14 01+T12+S12N25 EXTERNAL TANK (RB1T51)

ALPHAT(5) = 0.100 BETAT (4) = 4.200

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.7460	.8530	.9280
PHI			
.000	-.0066	.0050	.0997
30.000	-.0270	.0055	.0809
60.000	-.0055	.0341	.1751
90.000	.0138	.1071	
120.000	.0324	.1251	.0871
135.000	.0331	.1121	.0055
150.000	-.0117	.0744	-.0071
165.000	.0517	.1065	-.0535
180.000	.0451	.1144	-.1105

ALPHAT(5) = 0.150 BETAT (5) = 0.400

SECTION (1)EXTERNAL TANK DEPENDENT VARIABLE CP

X/LT	.0000	.0060	.0490	.1130	.1780	.1940	.2150	.2420	.2900	.3440	.3940	.4510	.5050	.5580	.6360
PHI															
.000	1.2570	1.1940	.8214	.3546	.0276	-.0411	-.1194	-.1070	-.0755	.0480	.0759	-.0004	-.0270	-.0336	-.0212
30.000			.6555	.2159	-.0870	-.1472	-.2118	-.2030	-.1757	.2095	.0939	-.0394	-.0640	-.0677	-.0666
60.000			.5118	.0894	-.1791	-.2264	-.2994	-.2708	.1400	.2478	-.0306	.0182	-.0447	-.0536	-.0510
90.000		.8021	.4218	.0174	-.2281	-.2731	-.3298	-.0772	.4701		-.3040	-.3035	-.0350	-.0916	-.0462
120.000			.3832	-.0119	-.2396	-.2792	-.3284	-.2883	.0359	-.0968	-.2849	-.2043	-.0603	-.0600	-.0328
135.000								-.2894		.1216		-.1723		-.0776	
150.000			.3873	-.0119	-.2371	-.2768	-.3330	-.2876	.0314	.1575	.0683	-.2129	-.2808	-.1228	-.1234
165.000				.0035	-.2337	-.2749	-.3334	-.3013	.0353	.1448	.1792	.0335	-.1434	-.0783	-.0399
180.000	1.2570	.7892	.4331	.0190	-.2218	-.2666	-.3279	-.3114	.0070	.1035	.1393	.0510	-.1821	-.0753	-.0672
270.000		1.2180							.6121						

X/LT	.7460	.8530	.9280
PHI			
.000	-.0477	-.0506	.0063
30.000	-.0792	-.0406	.0349
60.000	-.0172	.0050	.1467
90.000	-.0399	.0637	
120.000	-.0030	.0792	.0592
135.000	-.0113	.0744	-.0277
150.000	-.0561	.0332	-.0721
165.000	.0002	.0544	-.0808
180.000	-.0293	.0468	-.1544

ARC11-716 IA14 C8+T12+S12N25+AT10 SRM NOZZLE (RB1X24) (28 SEP 73)

REFERENCE DATA

SREF = 8.4210 SQ.FT. XMRP = 29.5800 INCHES
LREF = 38.7090 INCHES YMRP = .0000 INCHES
BREF = 38.7090 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAO = -10.000 ELEVON = .000
RUDDER = .000 SPDBRK = .000

MACH (1) = .902 BETAO (1) = -9.890

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4411	-.4411	-.4469
45.000	-.4401	-.4404	-.4554
90.000	-.4374	-.4579	-.4785
135.000	-.4474	-.4542	-.4865
180.000	-.4667	-.4650	-.4730
225.000	-.4579	-.4589	-.4608
270.000	-.4512	-.4700	-.4523
315.000	-.4411	-.4394	-.4383

MACH (1) = .899 BETAO (2) = 10.090

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.2887	-.2992	-.3182
45.000	-.2877	-.2999	-.3192
90.000	-.3029	-.2967	-.3117
135.000	-.2947	-.2994	-.3022
180.000	-.2884	-.2949	-.2939
225.000	-.2882	-.3007	-.2762
270.000	-.2877	-.2987	-.3013
315.000	-.2919	-.2999	-.3003

ARC11-716 IA14 OL+T12+S12N25+AT10 SRM NOZZLE (RB1X25) (28 SEP 73)

REFERENCE DATA

SREF = 8.4210 SQ.FT. XMRP = 29.5800 INCHES
LREF = 38.7090 INCHES YMRP = .0000 INCHES
BREF = 38.7090 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAO = -8.000 ELEVON = .000
RUDDER = .000 SPOBRK = .000

MACH (1) = .899 BETAO (1) = -9.930

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4289	-.4294	-.4389
45.000	-.4299	-.4336	-.4436
90.000	-.4246	-.4342	-.4621
135.000	-.4256	-.4509	-.4653
180.000	-.4468	-.4499	-.4623
225.000	-.4513	-.4441	-.4506
270.000	-.4301	-.4486	-.4392
315.000	-.4238	-.4344	-.3842

MACH (1) = .898 BETAO (2) = 10.098

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.2972	-.3127	-.3226
45.000	-.2894	-.3142	-.3286
90.000	-.3015	-.3068	-.3191
135.000	-.3007	-.3051	-.3053
180.000	-.2935	-.2970	-.3003
225.000	-.2970	-.2950	-.2916
270.000	-.2947	-.2968	-.3015
315.000	-.3042	-.3000	-.3032

ARC11-716 IA14 O6+T12+S12M25+AT10 SRN NOZZLE (RB1X26) (28 SEP 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	29.5800 INCHES		
LREF =	38.7090 INCHES	YMRP =	.0000 INCHES		
BREF =	38.7090 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHAO =	-6.000	ELEVON =	.000
RUDDER =	.000	SPOBRK =	.000

MACH (1) = .897 BETAO (1) = -9.940

SECTION (1)SRN NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4203	-.4365	-.4329
45.000	-.4224	-.4298	-.4454
90.000	-.4126	-.4376	-.4653
135.000	-.4253	-.4481	-.4628
180.000	-.4370	-.4444	-.4353
225.000	-.4273	-.4404	-.4420
270.000	-.4238	-.4414	-.4082
315.000	-.4158	-.4384	-.4075

MACH (1) = .898 BETAO (2) = 10.070

SECTION (1)SRN NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3091	-.3146	-.3333
45.000	-.2949	-.3193	-.3385
90.000	-.2984	-.3101	-.3255
135.000	-.3118	-.3049	-.3071
180.000	-.2984	-.2937	-.3022
225.000	-.3019	-.2897	-.2980
270.000	-.2976	-.3066	-.3020
315.000	-.3156	-.3124	-.3142

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X27) (20 SEP 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	29.5800 INCHES		
LREF =	30.7090 INCHES	YMRP =	.0000 INCHES		
BREF =	30.7090 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHAO =	-4.000	ELEVON =	.000
RUDDER =	.000	SPOBRK =	.000

MACH (1) = .890 BETAO (1) = -9.990

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4290	-.4340	-.4445
45.000	-.4277	-.4342	-.4547
90.000	-.4220	-.4375	-.4987
135.000	-.4285	-.4393	-.4667
180.000	-.4387	-.4515	-.4510
225.000	-.4327	-.4393	-.4517
270.000	-.4245	-.4355	-.4024
315.000	-.4205	-.4448	-.4340

ARC11-716 IA14 OL+T12+S12M25+AT10 SRM NOZZLE (R01X20) (20 SEP 75)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES
LREF = 30.7090 INCHES YMRP = .0000 INCHES
BREF = 30.7090 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAO = .000 ELEVON = .000
RUDDER = .000 SPOBRK = .000

MACH (1) = 1.246 BETAO (1) = -10.000

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.2480	.9780	.9930
PHI			
.000	-.4298	-.4455	-.4536
45.000	-.4387	-.4447	-.4531
90.000	-.4392	-.4403	-.4492
135.000	-.4372	-.4411	-.4453
180.000	-.4419	-.4389	-.4390
225.000	-.4413	-.4445	-.4363
270.000	-.4497	-.4520	-.4084
315.000	-.4473	-.4502	-.4474

MACH (1) = 1.245 BETAO (2) = -7.980

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9780	.9930
PHI			
.000	-.4201	-.4258	-.4334
45.000	-.4180	-.4248	-.4369
90.000	-.4185	-.4201	-.4311
135.000	-.4185	-.4175	-.4237
180.000	-.4188	-.4143	-.4140
225.000	-.4155	-.4201	-.4153
270.000	-.4255	-.4329	-.3114
315.000	-.4271	-.4410	-.4445

MACH (1) = 1.248 BETAO (3) = -6.020

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9780	.9930
PHI			
.000	-.4219	-.4313	-.4334
45.000	-.4214	-.4292	-.4423
90.000	-.4214	-.4284	-.4366
135.000	-.4211	-.4269	-.4311
180.000	-.4211	-.4214	-.4196
225.000	-.4229	-.4287	-.4313

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X28)

MACH (1) = 1.248 BETAO (3) = -6.020

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
270.000	-.4232	-.4295	-.2630
315.000	-.4303	-.4546	-.4532

MACH (1) = 1.247 BETAO (4) = -3.950

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

Y/LS	.9480	.9790	.9930
PHI			
.000	-.4051	-.4098	-.4087
45.000	-.3978	-.4093	-.4197
90.000	-.4009	-.4090	-.4187
135.000	-.4012	-.4090	-.4145
180.000	-.4033	-.4090	-.4008
225.000	-.4051	-.4231	-.4203
270.000	-.4007	-.4056	-.2260
315.000	-.4077	-.4354	-.4367

MACH (1) = 1.246 BETAO (5) = -2.040

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4209	-.4280	-.4343
45.000	-.4206	-.4269	-.4346
90.000	-.4198	-.4241	-.4356
135.000	-.4204	-.4210	-.4288
180.000	-.4206	-.4236	-.4177
225.000	-.4222	-.4238	-.4195
270.000	-.4240	-.4348	-.3339
315.000	-.4301	-.4359	-.4369

ARC11-716 IA14 OL+T12+S12N25+AT10 SRM NOZZLE (RB1X28)

MACH (1) = 1.246 BETAO (6) = .010

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3905	-.4028	-.4103
45.000	-.3978	-.4075	-.4184
90.000	-.3968	-.4051	-.4150
135.000	-.3999	-.3998	-.4085
180.000	-.3981	-.4009	-.3947
225.000	-.4026	-.4032	-.4007
270.000	-.4012	-.4147	-.3253
315.000	-.4014	-.4066	-.4116

ARC11-716 IA14 O1+T12+S12N25+AT10 SRM NOZZLE (RB1X29) (28 SEP 75)

REFERENCE DATA

SREF =	2.4210	SQ.FT.	XMRP =	29.5800	INCHES
LREF =	38.7090	INCHES	YMRP =	.0000	INCHES
BREF =	38.7090	INCHES	ZMRP =	.0000	INCHES
SCALE =	.0300	SCALE			

PARAMETRIC DATA

ALPHAO =	-10.000	ELEVON =	.000
RUDDER =	.000	SPDBRK =	.000

MACH (1) = 1.245 BETAO (1) = .030

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4137	-.4237	-.4275
45.000	-.4223	-.4297	-.4404
90.000	-.4216	-.4333	-.4532
135.000	-.4223	-.4292	-.4394
180.000	-.4263	-.4271	-.4189
225.000	-.4242	-.4339	-.4282
270.000	-.4192	-.4299	-.2931
315.000	-.4237	-.4299	-.4295

ARC11-716 IA14 O1+T12+S12N25+AT10 SRM NOZZLE (RB1X31) (06 FEB 74)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES
LREF = 38.7090 INCHES YMRP = .0000 INCHES
BREF = 38.7090 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = .900 ELEVON = .000
RUDDER = .000 SPDBRK = .000

ALPHAO(1) = -10.140 BETAO (1) = -8.370

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4371	-.4322	-.4467
45.000	-.4355	-.4393	-.4427
90.000	-.4348	-.4549	-.4721
135.000	-.4399	-.4622	-.4780
180.000	-.4528	-.4655	-.4595
225.000	-.4518	-.4627	-.4505
270.000	-.4399	-.4610	-.4326
315.000	-.4340	-.4419	-.3778

ALPHAO(1) = -10.130 BETAO (2) = -6.560

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4144	-.4205	-.4325
45.000	-.4223	-.4348	-.4486
90.000	-.4195	-.4435	-.4664
135.000	-.4376	-.4506	-.4710
180.000	-.4424	-.4534	-.4382
225.000	-.4409	-.4511	-.4367
270.000	-.4254	-.4465	-.3990
315.000	-.4177	-.4328	-.3844

ALPHAO(1) = -10.130 BETAO (3) = -4.840

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4173	-.4196	-.4222
45.000	-.4147	-.4221	-.4466
90.000	-.4081	-.4349	-.4713
135.000	-.4269	-.4476	-.4647
180.000	-.4404	-.4504	-.4345
225.000	-.4310	-.4402	-.4362

ARC11-716 IA14 O1+T12+S12N25+AT10 SRM NOZZLE (RB1X31)

ALPHAO(1) = -10.130 BETAO (3) = -4.840

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
270.000	-.4114	-.4324	-.3721
315.000	-.4031	-.4166	-.3916

ALPHAO(1) = -10.080 BETAO (4) = -3.250

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4027	-.4089	-.4127
45.000	-.3964	-.4142	-.4324
90.000	-.4029	-.4252	-.4530
135.000	-.4082	-.4289	-.4350
180.000	-.4199	-.4357	-.4229
225.000	-.4164	-.4314	-.4274
270.000	-.3974	-.4084	-.3265
315.000	-.3961	-.4154	-.3912

ALPHAO(1) = -10.040 BETAO (5) = -1.600

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4042	-.4184	-.4189
45.000	-.4080	-.4242	-.4487
90.000	-.4032	-.4323	-.4616
135.000	-.4047	-.4270	-.4485
180.000	-.4191	-.4303	-.4199
225.000	-.4057	-.4297	-.4367
270.000	-.3976	-.3999	-.3305
315.000	-.4017	-.4214	-.4106

ARC11-716 IA14 O1+T12+S12N25+ATIO SRM NOZZLE (RB1X31)

ALPHAO(1) = -10.040 BETAO (6) = .100

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4114	-.4099	-.4174
45.000	-.4023	-.4220	-.4465
90.000	-.3858	-.4220	-.4506
135.000	-.4099	-.4195	-.4240
180.000	-.4010	-.4225	-.4313
225.000	-.3995	-.4142	-.3868
270.000	-.3952	-.4030	-.3083
315.000	-.3888	-.4192	-.4313

ALPHAO(1) = -10.040 BETAO (7) = 1.810

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3750	-.3973	-.4038
45.000	-.3821	-.4011	-.4117
90.000	-.3773	-.3882	-.3983
135.000	-.3765	-.3869	-.4099
180.000	-.3831	-.4093	-.4401
225.000	-.4028	-.3796	-.2000
270.000	-.3879	-.4107	-.3279
315.000	-.3765	-.4061	-.3950

ALPHAO(1) = -10.130 BETAO (8) = 3.580

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3775	-.3889	-.4084
45.000	-.3752	-.3790	-.4016
90.000	-.3752	-.3917	-.4173
135.000	-.3994	-.3914	-.3942
180.000	-.3841	-.4028	-.4061
225.000	-.3739	-.3965	-.3264
270.000	-.3711	-.3939	-.3520
315.000	-.3731	-.3830	-.3865

ARC11-716 IA14 O1+T12+S12N25+AT10 SRM NOZZLE (RB1X31)

ALPHAO(1) = -10.130 BETAO (9) = 5.250

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3326	-.3577	-.3884
45.000	-.3389	-.3517	-.3746
90.000	-.3341	-.3467	-.3655
135.000	-.3387	-.3467	-.3510
180.000	-.3414	-.3447	-.3512
225.000	-.3434	-.3555	-.3263
270.000	-.3489	-.3572	-.3502
315.000	-.3522	-.3552	-.3605

ALPHAO(1) = -10.120 BETAO (10) = 7.010

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.2943	-.3214	-.3430
45.000	-.3079	-.3184	-.3511
90.000	-.3144	-.3156	-.3171
135.000	-.3114	-.3154	-.3174
180.000	-.3074	-.3086	-.3107
225.000	-.3109	-.3065	-.2981
270.000	-.3091	-.3204	-.3293
315.000	-.3247	-.3207	-.3316

ALPHAO(1) = -10.130 BETAO (11) = 8.780

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.2803	-.2909	-.3851
45.000	-.2801	-.2921	-.3031
90.000	-.2926	-.2941	-.3009
135.000	-.2881	-.2848	-.2903
180.000	-.2849	-.2871	-.2939
225.000	-.2748	-.2953	-.2773
270.000	-.2766	-.2788	-.2931
315.000	-.2876	-.2881	-.2986

ARC11-716 IA14 O1+T12+S12N25+AT10 SRM NOZZLE (RB1X31)

ALPHAO(2) = -8.110 BETAO (1) = -8.350

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4040	-.4073	-.4155
45.000	-.4095	-.4113	-.4271
90.000	-.4063	-.4251	-.4543
135.000	-.4128	-.4298	-.4546
180.000	.4303	-.4356	-.4435
225.000	-.4253	-.4288	-.4354
270.000	-.4160	-.4356	-.4132
315.000	-.4020	-.4173	-.3846

ALPHAO(2) = -8.120 BETAO (2) = -6.640

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3940	-.4048	-.4025
45.000	-.3957	-.4078	-.4198
90.000	-.3985	-.4148	-.4452
135.000	-.4040	-.4208	-.4552
180.000	-.4251	-.4281	-.4395
225.000	-.4201	-.4279	-.4308
270.000	-.4048	-.4241	-.3846
315.000	-.3957	-.4058	-.3745

ALPHAO(2) = -8.120 BETAO (3) = -4.940

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3967	-.4032	-.3994
45.000	-.3949	-.3994	-.4270
90.000	-.3982	-.4195	-.4568
135.000	-.4062	-.4222	-.4405
180.000	-.4272	-.4320	-.4330
225.000	-.4202	-.4232	-.4317
270.000	-.3984	-.4094	-.3627
315.000	-.3902	-.4084	-.3901

ARC11-716 IA14 O1+T12+S12N25+AT10 SRM NOZZLE (RB1X31)

ALPHAO(2) = -8.130 BETAO (4) = -3.270

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3876	-.4049	-.3962
45.000	-.3949	-.4057	-.4260
90.000	-.3936	-.4145	-.4461
135.000	-.4084	-.4175	-.4333
180.000	-.4120	-.4117	-.4172
225.000	-.4014	-.4245	-.4415
270.000	-.3901	-.3949	-.3202
315.000	-.3916	-.4084	-.4003

ALPHAO(2) = -8.130 BETAO (5) = -1.600

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3986	-.4019	-.4067
45.000	-.3929	-.4084	-.4424
90.000	-.3878	-.4167	-.4514
135.000	-.4049	-.4145	-.4233
180.000	-.4102	-.4140	-.4179
225.000	-.4002	-.4098	-.4214
270.000	-.3944	-.3929	-.3182
315.000	-.3951	-.4145	-.4136

ALPHAO(2) = -8.130 BETAO (6) = .010

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3929	-.3964	-.4034
45.000	-.3902	-.4054	-.4402
90.000	-.3879	-.4077	-.4477
135.000	-.3854	-.4037	-.4220
180.000	-.3979	-.4154	-.4176
225.000	-.3947	-.4094	-.3665
270.000	-.3879	-.3862	-.3291
315.000	-.3902	-.4062	-.4131

ARC11-715 IA14 O1+T12+S12N25+AT10 SRM NOZZLE (RB1X31)

ALPHAO(2) = -8.120 BETAO (7) = 1.700

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3618	-.3771	-.3806
45.000	-.3596	-.3939	-.4081
90.000	-.3623	-.3718	-.3961
135.000	-.3691	-.3728	-.3771
180.000	-.3738	-.4384	-.4434
225.000	-.3934	-.3026	-.1902
270.000	-.3751	-.3991	-.3232
315.000	-.3611	-.3708	-.3805

ALPHAO(2) = -8.110 BETAO (8) = 3.340

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3285	-.3428	-.3496
45.000	-.3278	-.3356	-.3493
90.000	-.3361	-.3396	-.3601
135.000	-.3418	-.3461	-.3586
180.000	-.3421	-.3428	-.3569
225.000	-.3705	-.3473	-.3047
270.000	-.3273	-.3438	-.3092
315.000	-.3305	-.3301	-.3498

ALPHAO(2) = -8.090 BETAO (9) = 4.950

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3110	-.3225	-.3467
45.000	-.3030	-.3180	-.3370
90.000	-.3000	-.3102	-.3370
135.000	-.3095	-.3152	-.3300
180.000	-.3003	-.3107	-.3221
225.000	-.2990	-.3120	-.2973
270.000	-.3053	-.3325	-.3108
315.000	-.3223	-.3227	-.3294

ARC11-716 IA14 OL+T12+S12N25+AT10 SRM NOZZLE (RB1X31)

ALPHAO(2) = -8.080 BETAO (10) = 6.750

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.2897	-.3103	-.3316
45.000	-.2920	-.3143	-.3338
90.000	-.2885	-.3002	-.3073
135.000	-.2925	-.2975	-.2955
180.000	-.2922	-.2897	-.2942
225.000	-.2922	-.2910	-.2879
270.000	-.2967	-.3035	-.3097
315.000	-.3090	-.3088	-.3140

ALPHAO(2) = -8.080 BETAO (11) = 8.570

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.2841	-.3071	-.3299
45.000	-.2921	-.3088	-.3189
90.000	-.2991	-.3054	-.3061
135.000	-.3009	-.2976	-.2939
180.000	-.2909	-.2944	-.2955
225.000	-.2934	-.2871	-.2922
270.000	-.2929	-.2901	-.2975
315.000	-.2934	-.2984	-.3087

ALPHAO(3) = -6.100 BETAO (1) = -8.140

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3998	-.4025	-.4043
45.000	-.3995	-.4160	-.4190
90.000	-.3973	-.4143	-.4331
135.000	-.3965	-.4193	-.4336
180.000	-.4155	-.4240	-.4263
225.000	-.4098	-.4195	-.4231
270.000	-.3990	-.4228	-.3958
315.000	-.3980	-.4053	-.3930

ARC11-716 IA14 OL+T12+S12M25+AT10 SRM NOZZLE (RB1X31)

ALPHA0(3) = -6.110 BETA0 (2) = -6.480

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3911	-.3956	-.3946
45.000	-.3871	-.3959	-.4066
90.000	-.3884	-.3994	-.4354
135.000	-.4006	-.4176	-.4482
180.000	-.4184	-.4196	-.4249
225.000	-.4101	-.4129	-.4161
270.000	-.3936	-.4171	-.3702
315.000	-.3816	-.3981	-.3845

ALPHA0(3) = -6.130 BETA0 (3) = -4.820

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3835	-.3940	-.3937
45.000	-.3848	-.4018	-.4178
90.000	-.3848	-.4103	-.4909
135.000	-.3963	-.4196	-.4389
180.000	-.4197	-.4269	-.4279
225.000	-.4084	-.4206	-.4262
270.000	-.3933	-.4116	-.3538
315.000	-.3808	-.4063	-.3852

ALPHA0(3) = -6.140 BETA0 (4) = -3.220

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3799	-.3943	-.4026
45.000	-.3943	-.3963	-.4220
90.000	-.3890	-.4112	-.4504
135.000	-.3973	-.4142	-.4414
180.000	-.4018	-.4162	-.4174
225.000	-.3910	-.4086	-.4320
270.000	-.3897	-.3963	-.3090
315.000	-.3799	-.4056	-.3938

ARC11-716 IA14 OL+T12+S12N25+AT10 SRN NOZZLE (RB1X31)

ALPHAO(3) = -6.030 BETAO (5) = -1.620

SECTION (1)SRN NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3894	-.3984	-.3983
45.000	-.3876	-.4099	-.4286
90.000	-.3881	-.4143	-.4301
135.000	-.3964	-.4103	-.4376
180.000	-.4094	-.4133	-.4192
225.000	-.3982	-.4123	-.4207
270.000	-.3957	-.3923	-.3210
315.000	-.3914	-.3953	-.3994

ALPHAO(3) = -6.030 BETAO (6) = .000

SECTION (1)SRN NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3758	-.3686	-.3791
45.000	-.3738	-.3858	-.4073
90.000	-.3686	-.3931	-.4326
135.000	-.3715	-.3896	-.3913
180.000	-.3871	-.3913	-.4008
225.000	-.3804	-.4086	-.3883
270.000	-.3743	-.3756	-.3133
315.000	-.3666	-.3876	-.3928

ALPHAO(3) = -6.030 BETAO (7) = 1.640

SECTION (1)SRN NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3334	-.3481	-.3488
45.000	-.3329	-.3483	-.3682
90.000	-.3274	-.3446	-.3707
135.000	-.3371	-.3580	-.3498
180.000	-.3416	-.4235	-.4261
225.000	-.3610	-.2901	-.1868
270.000	-.3411	-.3087	-.2785
315.000	-.3344	-.3466	-.3518

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X31)

ALPHA0(3) = -6.180 BETA0 (8) = 3.330

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3108	-.3308	-.3385
45.000	-.3150	-.3250	-.3352
90.000	-.3130	-.3312	-.3632
135.000	-.3238	-.3345	-.3422
180.000	-.3258	-.3332	-.3357
225.000	-.3160	-.3405	-.2935
270.000	-.3130	-.3287	-.2784
315.000	-.3163	-.3223	-.3322

ALPHA0(3) = -6.180 BETA0 (9) = 5.010

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3071	-.3229	-.3379
45.000	-.3059	-.3166	-.3304
90.000	-.3007	-.3107	-.3314
135.000	-.3076	-.3187	-.3202
180.000	-.3081	-.3087	-.3123
225.000	-.3031	-.3094	-.3053
270.000	-.3106	-.3217	-.3041
315.000	-.3199	-.3149	-.3228

ALPHA0(3) = -6.140 BETA0 (10) = 6.740

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.2965	-.3057	-.3320
45.000	-.2855	-.3032	-.3330
90.000	-.2912	-.2975	-.3015
135.000	-.2905	-.3002	-.2945
180.000	-.2870	-.2920	-.2881
225.000	-.2880	-.2860	-.2846
270.000	-.2980	-.3002	-.2996
315.000	-.3052	-.3102	-.3084

ARC11-716 IA14 O1+T12+S12N25+AT10 SRM NOZZLE (RB1X31)

ALPHAO(3) = -6.140 BETAO (11) = 8.500

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.2900	-.3038	-.3287
45.000	-.2820	-.3050	-.3307
90.000	-.2900	-.2972	-.3132
135.000	-.2918	-.2925	-.3052
180.000	-.2900	-.2844	-.2905
225.000	-.2885	-.2772	-.2860
270.000	-.2955	-.2899	-.2972
315.000	-.3085	-.3110	-.3132

ALPHAO(4) = -4.170 BETAO (1) = -9.980

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4231	-.4316	-.4403
45.000	-.4236	-.4326	-.4523
90.000	-.4142	-.4386	-.4570
135.000	-.4306	-.4446	-.4665
180.000	-.4346	-.4496	-.4532
225.000	-.4251	-.4471	-.4502
270.000	-.4259	-.4396	-.4115
315.000	-.4289	-.4421	-.4382

ALPHAO(4) = -4.190 BETAO (2) = -7.970

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4070	-.4098	-.4118
45.000	-.4055	-.4135	-.4283
90.000	-.3935	-.4180	-.4476
135.000	-.4100	-.4215	-.4481
180.000	-.4208	-.4215	-.4311
225.000	-.4155	-.4170	-.4248
270.000	-.3977	-.4198	-.3690
315.000	-.3980	-.4173	-.4053

ARC11-716 IA14 O1+T12+S12N25+AT10 SRM NOZZLE (RB1X31)

ALPHAO(4) = -4.210 BETAO (3) = -5.970

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3985	-.3990	-.4121
45.000	-.3939	-.4133	-.4312
90.000	-.3939	-.4118	-.4531
135.000	-.4110	-.4197	-.4498
180.000	-.4110	-.4281	-.4190
225.000	-.4135	-.4187	-.4162
270.000	-.3934	-.4213	-.3535
315.000	-.3914	-.4134	-.3965

ALPHAO(4) = -4.190 BETAO (4) = -3.980

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3918	-.4039	-.4014
45.000	-.3903	-.4125	-.4295
90.000	-.3963	-.4161	-.4515
135.000	-.4021	-.4247	-.4388
180.000	-.4211	-.4226	-.4137
225.000	-.4118	-.4181	-.4172
270.000	-.4009	-.4173	-.3421
315.000	-.3989	-.4072	-.3999

ALPHAO(4) = -4.180 BETAO (5) = -1.980

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3918	-.3936	-.4064
45.000	-.3845	-.3991	-.4216
90.000	-.3852	-.4140	-.4454
135.000	-.4002	-.4193	-.4419
180.000	-.4120	-.4160	-.4112
225.000	-.3981	-.4137	-.4117
270.000	-.3926	-.3988	-.3282
315.000	-.3847	-.4033	-.3984

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ARC11-716 IA14 O1+T12+S12N25+AT1D SRM NOZZLE (RB1X31)

ALPHAO(4) = -4.180 BETAO (6) = .030

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3471	-.3329	-.3342
45.000	-.3282	-.3372	-.3463
90.000	-.3450	-.3276	-.3591
135.000	-.3319	-.3612	-.3894
180.000	-.3350	-.3935	-.3797
225.000	-.3725	-.3127	-.2558
270.000	-.3481	-.3468	-.2520
315.000	-.3342	-.3594	-.3695

ALPHAO(4) = -4.170 BETAO (7) = 2.020

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3269	-.3362	-.3516
45.000	-.3309	-.3380	-.3594
90.000	-.3357	-.3387	-.3632
135.000	-.3398	-.3468	-.3453
180.000	-.3400	-.4009	-.4066
225.000	-.3428	-.2961	-.1949
270.000	-.3415	-.3683	-.2845
315.000	-.3325	-.3428	-.3455

ALPHAO(4) = -4.240 BETAO (8) = 4.040

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3419	-.3545	-.3649
45.000	-.3306	-.3447	-.3704
90.000	-.3346	-.3508	-.3712
135.000	-.3432	-.3447	-.3697
180.000	-.3412	-.3427	-.3491
225.000	-.3372	-.3442	-.3171
270.000	-.3367	-.3493	-.3128
315.000	-.3465	-.3420	-.3433

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X31)

ALPHAO(4) = -4.230 BETAO (9) = 6.050

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3276	-.3424	-.3649
45.000	-.3183	-.3371	-.3674
90.000	-.3215	-.3314	-.3465
135.000	-.3238	-.3231	-.3362
180.000	-.3223	-.3198	-.3205
225.000	-.3240	-.3233	-.3180
270.000	-.3233	-.3362	-.3228
315.000	-.3371	-.3359	-.3370

ALPHAO(4) = -4.200 BETAO (10) = 8.070

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3237	-.3273	-.3583
45.000	-.3116	-.3346	-.3623
90.000	-.3149	-.3314	-.3480
135.000	-.3210	-.3203	-.3231
180.000	-.3137	-.3188	-.3180
225.000	-.3129	-.3153	-.3035
270.000	-.3119	-.3198	-.3192
315.000	-.3303	-.3306	-.3312

ALPHAO(4) = -4.200 BETAO (11) = 10.080

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.2976	-.3072	-.3345
45.000	-.2841	-.3034	-.3418
90.000	-.2959	-.3015	-.3277
135.000	-.2959	-.2916	-.3030
180.000	-.2933	-.2914	-.2851
225.000	-.2856	-.2891	-.2809
270.000	-.2916	-.3037	-.3011
315.000	-.3069	-.3163	-.2991

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ARC11-716 IA14 O1+T12+S12N25+AT10 SRM NOZZLE (RB1X31)

ALPHAO(5) = -2.870 BETAO (1) = -9.990

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4434	-.4436	-.4554
45.000	-.4403	-.4406	-.4617
90.000	-.4234	-.4454	-.4814
135.000	-.4345	-.4590	-.4660
180.000	-.4514	-.4544	-.4538
225.000	-.4497	-.4552	-.4506
270.000	-.4315	-.4567	-.4003
315.000	-.4358	-.4519	-.4403

ALPHAO(5) = -2.890 BETAO (2) = -7.990

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4146	-.4280	-.4240
45.000	-.4098	-.4202	-.4401
90.000	-.3997	-.4260	-.4538
135.000	-.4121	-.4384	-.4495
180.000	-.4308	-.4348	-.4337
225.000	-.4247	-.4316	-.4215
270.000	-.4141	-.4295	-.3592
315.000	-.4111	-.4325	-.4217

ALPHAO(5) = -2.870 BETAO (3) = -5.970

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4065	-.4047	-.4078
45.000	-.4007	-.4055	-.4283
90.000	-.3888	-.4143	-.4470
135.000	-.4080	-.4240	-.4404
180.000	-.4143	-.4237	-.4184
225.000	-.4080	-.4217	-.4212
270.000	-.3959	-.4191	-.3561
315.000	-.4004	-.4164	-.3996

ARC11-716 IA14 OI+T12+S12N25+AT10 SRM NOZZLE (RB1X31)

ALPHAO(5) = -2.860 BETAO (4) = -3.980

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3899	-.3901	-.4009
45.000	-.3889	-.3999	-.4226
90.000	-.3914	-.4050	-.4389
135.000	-.3989	-.4050	-.4351
180.000	-.4045	-.4125	-.4123
225.000	-.4014	-.4085	-.4110
270.000	-.3896	-.4110	-.3432
315.000	-.3796	-.4085	-.3931

ALPHAO(5) = -2.840 BETAO (5) = -1.990

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3861	-.3924	-.3984
45.000	-.3772	-.3936	-.4186
90.000	-.3810	-.4035	-.4352
135.000	-.3949	-.4050	-.4231
180.000	-.3982	-.4093	-.4056
225.000	-.3949	-.3987	-.4028
270.000	-.3850	-.3904	-.3461
315.000	-.3808	-.3974	-.3906

ALPHAO(5) = -2.840 BETAO (6) = .010

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3227	-.3423	-.3290
45.000	-.3360	-.3285	-.3741
90.000	-.3312	-.3645	-.3570
135.000	-.3494	-.3305	-.3436
180.000	-.3259	-.3658	-.3832
225.000	-.3431	-.3295	-.2272
270.000	-.3413	-.3373	-.2472
315.000	-.3295	-.3708	-.3698

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X31)

ALPHA0(5) = -2.640 BETA0 (7) = 2.040

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3400	-.3435	-.3595
45.000	-.3297	-.3452	-.3777
90.000	-.3344	-.3545	-.3616
135.000	-.3369	-.3412	-.3495
180.000	-.3372	-.3907	-.3949
225.000	-.3508	-.3102	-.1831
270.000	-.3395	-.3595	-.2930
315.000	-.3362	-.3568	-.3517

ALPHA0(5) = -2.690 BETA0 (8) = 4.050

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3157	-.3220	-.3376
45.000	-.3086	-.3177	-.3482
90.000	-.3064	-.3212	-.3363
135.000	-.3094	-.3151	-.3318
180.000	-.3180	-.3124	-.3084
225.000	-.3102	-.3204	-.3046
270.000	-.3089	-.3220	-.2841
315.000	-.3248	-.3237	-.3241

ALPHA0(5) = -2.870 BETA0 (9) = 6.060

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3113	-.3189	-.3321
45.000	-.3007	-.3206	-.3488
90.000	-.2999	-.3122	-.3410
135.000	-.3042	-.3072	-.3132
180.000	-.3042	-.3034	-.2995
225.000	-.3035	-.3006	-.2955
270.000	-.3075	-.3084	-.3010
315.000	-.3204	-.3158	-.3075

ARC11-716 IA14 D1+T12+S12N25+AT10 SRM NOZZLE (RB1X31)

ALPHA0(5) = -2.870 BETA0 (10) = 8.070

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.2961	-.3054	-.3236
45.000	-.2858	-.3021	-.3465
90.000	-.2945	-.3010	-.3304
135.000	-.2893	-.2985	-.3028
180.000	-.2883	-.2920	-.2919
225.000	-.2859	-.2883	-.2866
270.000	-.2855	-.2872	-.2951
315.000	-.3005	-.3005	-.3011

ALPHA0(5) = -2.830 BETA0 (11) = 10.090

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3031	-.3228	-.3406
45.000	-.2873	-.3149	-.3567
90.000	-.2915	-.3102	-.3371
135.000	-.3071	-.2973	-.3094
180.000	-.2996	-.2943	-.2933
225.000	-.2971	-.2933	-.2846
270.000	-.3001	-.3006	-.2993
315.000	-.3099	-.3182	-.3133

ALPHA0(6) = -.690 BETA0 (1) = -10.000

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4470	-.4508	-.4487
45.000	-.4292	-.4560	-.4663
90.000	-.4287	-.4397	-.4643
135.000	-.4402	-.4472	-.4718
180.000	-.4382	-.4510	-.4622
225.000	-.4350	-.4487	-.4517
270.000	-.4437	-.4437	-.4162
315.000	-.4367	-.4430	-.4627

ARC11-71G IA14 (01+T12+S12N25+AT10 SRM NOZZLE (RB1X31.

ALPHA0(6) = -.680 BETA0 (2) = -7.980

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4212	-.4249	-.4255
45.000	-.4086	-.419	-.4456
90.000	-.4003	-.4	-.4554
135.000	-.4131	-.4287	-.4456
180.000	-.4207	-.4245	-.4298
225.000	-.4197	-.4227	-.4280
270.000	-.4126	-.4270	-.3827
315.000	-.4109	-.4335	-.4293

ALPHA0(6) = -.670 BETA0 (3) = -5.980

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4031	-.4087	-.4119
45.000	-.4001	-.4021	-.4265
90.000	-.3916	-.4084	-.4426
135.000	-.4001	-.4177	-.4346
180.000	-.4127	-.4129	-.4203
225.000	-.4099	-.4099	-.4135
270.000	-.3996	-.4132	-.3754
315.000	-.3921	-.4074	-.4025

ALPHA0(6) = -.660 BETA0 (4) = -3.970

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3917	-.3980	-.4000
45.000	-.3885	-.3983	-.4164
90.000	-.3920	-.4018	-.4344
135.000	-.3902	-.4003	-.4289
180.000	-.3905	-.4003	-.4104
225.000	-.3917	-.4066	-.4057
270.000	-.3910	-.4066	-.3809
315.000	-.3905	-.3983	-.4039

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1.31)

ALPHA0(6) = -.660 BETA0 (5) = -1.980

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3789	-.3802	-.3950
45.000	-.3759	-.3837	-.4111
90.000	-.3744	-.3912	-.4230
135.000	-.3812	-.3839	-.4207
180.000	-.3781	-.3847	-.3928
225.000	-.3749	-.3922	-.3916
270.000	-.3658	-.3804	-.3244
315.000	-.3741	-.3910	-.3928

ALPHA0(6) = -.660 BETA0 (6) = .010

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3219	-.3520	-.3535
45.000	-.3192	-.3302	-.3491
90.000	-.3209	-.3390	-.3601
135.000	-.3264	-.3263	-.3450
180.000	-.3285	-.3413	-.3711
225.000	-.3277	-.3290	-.2388
270.000	-.3327	-.3248	-.2630
315.000	-.3290	-.3626	-.3617

ALPHA0(6) = -.670 BETA0 (7) = 2.050

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3191	-.3344	-.3403
45.000	-.3189	-.3329	-.3576
90.000	-.3261	-.3345	-.3539
135.000	-.3267	-.3353	-.3361
180.000	-.3272	-.3639	-.3630
225.000	-.3307	-.3137	-.2108
270.000	-.3349	-.3471	-.2875
315.000	-.3256	-.3443	-.3520

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ARC11-7:S IA14 DI+T12+S12N25+AT10 SRM NOZZLE (RB1X31

ALPHA0(6) = -.680 BETA0 (8) = 4.080

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3158	-.3259	-.3374
45.000	-.3080	-.3203	-.3535
90.000	-.3065	-.3138	-.3445
135.000	-.3123	-.3100	-.3258
180.000	-.3108	-.3125	-.3097
225.000	-.3105	-.3178	-.3072
270.000	-.3067	-.3236	-.2934
315.000	-.3178	-.3223	-.3195

ALPHA0(6) = -.690 BETA0 (9) = 6.080

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3113	-.3171	-.3319
45.000	-.2992	-.3217	-.3490
90.000	-.3032	-.3137	-.3420
135.000	-.3149	-.3107	-.3235
180.000	-.3048	-.3101	-.3046
225.000	-.3912	-.3021	-.2991
270.000	-.3038	-.3074	-.3071
315.000	-.3083	-.3112	-.3104

ALPHA0(6) = -.690 BETA0 (10) = 8.080

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3047	-.3207	-.3398
45.000	-.2924	-.3165	-.3523
90.000	-.2964	-.3072	-.3345
135.000	-.3072	-.3062	-.3160
180.000	-.3074	-.3022	-.2948
225.000	-.3009	-.2922	-.2955
270.000	-.3004	-.3037	-.3062
315.000	-.3165	-.3213	-.3085

ARC11-716 IA14 01+T12+S12R25+AT10 SRM NOZZLE (RB1X31)

ALPHA0(6) = -.690 BETA0 (11) = 10.120

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3127	-.3278	-.3443
45.000	-.2908	-.3268	-.3619
90.000	-.2971	-.3154	-.3436
135.000	-.3074	-.3102	-.3210
180.000	-.3006	-.3099	-.3026
225.000	-.2991	-.2968	-.2918
270.000	-.3029	-.3093	-.2998
315.000	-.3240	-.3265	-.3186

ALPHA0(7) = 2.080 BETA0 (1) = -10.000

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4434	-.4408	-.4477
45.000	-.4346	-.4484	-.4610
90.000	-.4216	-.4459	-.4635
135.000	-.4299	-.4477	-.4663
180.000	-.4452	-.4434	-.4514
225.000	-.4381	-.4399	-.4454
270.000	-.4276	-.4364	-.4181
315.000	-.4311	-.4371	-.4378

ALPHA0(7) = 1.980 BETA0 (2) = -5.980

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3809	-.4063	-.4055
45.000	-.3852	-.4028	-.4125
90.000	-.3794	-.4022	-.4298
135.000	-.3862	-.4002	-.4238
180.000	-.3907	-.3924	-.3943
225.000	-.3894	-.3932	-.3968
270.000	-.3842	-.3874	-.3625
315.000	-.3932	-.4022	-.4023

TABULATED PRESSURE DATA - [illegible]

ARC11-716 DATA 01+T12+S12N25+AT1D SRM NOZZLE (RB1X31)

ALPHAD(7) = 1.970 BETAD (3) = -3.990

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3891	-.3951	-.3942
45.000	-.3819	-.3951	-.4092
90.000	-.3786	-.3937	-.4177
135.000	-.3769	-.3972	-.4117
180.000	-.3821	-.3944	-.3993
225.000	-.3831	-.3859	-.3928
270.000	-.3764	-.3844	-.3552
315.000	-.3874	-.3864	-.3938

ALPHAD(7) = 1.980 BETAD (4) = -1.990

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3736	-.3714	-.3889
45.000	-.3618	-.3726	-.4017
90.000	-.3613	-.3799	-.4090
135.000	-.3601	-.3751	-.3929
180.000	-.3621	-.3749	-.3781
225.000	-.3661	-.3791	-.3731
270.000	-.3661	-.3741	-.3147
315.000	-.3646	-.3739	-.3726

ALPHAD(7) = 1.980 BETAD (5) = .060

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3118	-.3211	-.3287
45.000	-.3111	-.3229	-.3621
90.000	-.3111	-.3312	-.3611
135.000	-.3214	-.3202	-.3347
180.000	-.3221	-.3443	-.3444
225.000	-.3287	-.3247	-.2523
270.000	-.3241	-.3176	-.2445
315.000	-.3133	-.3546	-.3604

ARC11-716 IA14 O1+T12+S12N25+AT10 SRM NOZZLE (RB1X31)

ALPHAO(7) = 1.970 BETAO (6) = 2.040

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	9790	.9930
PHI			
.000	-.3122	-.3242	-.3287
45.000	-.3115	-.3297	-.3485
90.000	-.3127	-.3255	-.3460
135.000	-.3182	-.3202	-.3262
180.000	-.3157	-.3445	-.3501
225.000	-.3192	-.3157	-.2243
270.000	-.3272	-.3272	-.2427
315.000	-.3217	-.3367	-.3519

ALPHAO(7) = 2.050 BETAO (7) = 4.050

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3266	-.3313	-.3484
45.000	-.3246	-.3296	-.3597
90.000	-.3183	-.3358	-.3612
135.000	-.3200	-.3278	-.3461
180.000	-.3291	-.3248	-.3234
225.000	-.3163	-.3265	-.3229
270.000	-.3150	-.3328	-.3026
315.000	-.3283	-.3361	-.3352

ALPHAO(7) = 2.050 BETAO (8) = 6.070

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3298	-.3278	-.3621
45.000	-.3128	-.3376	-.3699
90.000	-.3128	-.3279	-.3539
135.000	-.3276	-.3311	-.3421
180.000	-.3243	-.3264	-.3262
225.000	-.3153	-.3214	-.3145
270.000	-.3228	-.3319	-.3270
315.000	-.3271	-.3356	-.3410

ARC11-716 IA14 O1+T12+S12N25+AT10 SRM NOZZLE (RB1X51)

ALPHAO(7) = 2.040 BETAO (9) = 5.000

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3368	-.3406	-.3677
45.000	-.3172	-.3350	-.3808
90.000	-.3222	-.3390	-.3562
135.000	-.3245	-.3317	-.3380
180.000	-.3192	-.3312	-.3262
225.000	-.3197	-.3292	-.3226
270.000	-.3260	-.3292	-.3389
315.000	-.3395	-.3398	-.3437

ALPHAO(7) = 2.020 BETAO (10) = 10.110

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3319	-.3439	-.3654
45.000	-.3212	-.3374	-.3842
90.000	-.3145	-.3324	-.3559
135.000	-.3185	-.3271	-.3389
180.000	-.3237	-.3256	-.3167
225.000	-.3207	-.3254	-.3192
270.000	-.3227	-.3369	-.3319
315.000	-.3434	-.3404	-.3379

ALPHAO(8) = 4.110 BETAO (1) = -10.000

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4243	-.4366	-.4469
45.000	-.4303	-.4351	-.4579
90.000	-.4223	-.4401	-.4627
135.000	-.4298	-.4409	-.4512
180.000	-.4283	-.4394	-.4305
225.000	-.4236	-.4286	-.4337
270.000	-.4283	-.4316	-.4091
315.000	-.4346	-.4389	-.4372

ARC11-716 IA14 01+T12+S12N25+AT1D SRM NOZZLE (RB1X31)

ALPHAO(8) = 4.150 BETAO (2) = -7.960

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4075	-.4195	-.4193
45.000	-.3970	-.4222	-.4375
90.000	-.3995	-.4213	-.4440
135.000	-.4055	-.4178	-.4375
180.000	-.4122	-.4118	-.4138
225.000	-.4130	-.4091	-.4088
270.000	-.4035	-.4091	-.3742
315.000	-.4065	-.4148	-.4237

ALPHAO(8) = 4.150 BETAO (3) = -5.960

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3940	-.3965	-.4097
45.000	-.3856	-.4010	-.4277
90.000	-.3818	-.4010	-.4322
135.000	-.3798	-.4028	-.4207
180.000	-.3898	-.3978	-.4011
225.000	-.3930	-.3920	-.3949
270.000	-.3878	-.3923	-.3487
315.000	-.3873	-.4072	-.4043

ALPHAO(8) = 4.160 BETAO (4) = -3.960

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3790	-.3940	-.3989
45.000	-.3780	-.3878	-.4159
90.000	-.3803	-.3932	-.4151
135.000	-.3818	-.3857	-.4034
180.000	-.3793	-.3852	-.3879
225.000	-.3763	-.3897	-.3797
270.000	-.3763	-.3870	-.3410
315.000	-.3790	-.3915	-.4038

ARC(1-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X31)

ALPHAO(8) = 4.040 BETAO (5) = -1.980

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3828	-.3801	-.3956
45.000	-.3687	-.3804	-.4100
90.000	-.3644	-.3764	-.4125
135.000	-.3590	-.3794	-.3956
180.000	-.3654	-.3749	-.3817
225.000	-.3679	-.3699	-.3767
270.000	-.3711	-.3791	-.3229
315.000	-.3794	-.3853	-.3859

ALPHAO(8) = 4.050 BETAO (6) = .030

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3319	-.3346	-.3448
45.000	-.3194	-.3329	-.3668
90.000	-.3229	-.3364	-.3658
135.000	-.3291	-.3271	-.3506
180.000	-.3279	-.3418	-.3544
225.000	-.3344	-.3453	-.2694
270.000	-.3279	-.3241	-.2359
315.000	-.3334	-.3782	-.3770

ALPHAO(8) = 4.050 BETAO (7) = 2.050

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3294	-.3523	-.3438
45.000	-.3229	-.3374	-.3675
90.000	-.3214	-.3224	-.3556
135.000	-.3304	-.3321	-.3376
180.000	-.3324	-.3533	-.3569
225.000	-.3282	-.3473	-.2483
270.000	-.3351	-.3453	-.2250
315.000	-.3336	-.3623	-.3683

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X31)

ALPHAO(8) = 4.030 BETAO (8) = 4.050

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3420	-.3550	-.3740
45.000	-.3435	-.3560	-.3855
90.000	-.3360	-.3525	-.3737
135.000	-.3358	-.3475	-.3620
180.000	-.3390	-.3418	-.3425
225.000	-.3348	-.3515	-.3440
270.000	-.3348	-.3617	-.3037
315.000	-.3520	-.3542	-.3547

ALPHAO(9) = 4.020 BETAO (9) = 6.070

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3454	-.3578	-.3780
45.000	-.3311	-.3529	-.3855
90.000	-.3309	-.3456	-.3656
135.000	-.3399	-.3464	-.3551
180.000	-.3346	-.3391	-.3373
225.000	-.3354	-.3464	-.3368
270.000	-.3401	-.3511	-.3309
315.000	-.3499	-.3526	-.3589

ALPHAO(8) = 4.010 BETAO (10) = 8.100

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3484	-.3582	-.3851
45.000	-.3292	-.3559	-.3953
90.000	-.3307	-.3445	-.3686
135.000	-.3350	-.3437	-.3532
180.000	-.3322	-.3292	-.3317
225.000	-.3422	-.3352	-.3325
270.000	-.3474	-.3474	-.3484
315.000	-.3547	-.3609	-.3561

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X31)

ALPHAO(8) = 4.000 BETAO (11) = 10.130

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3356	-.3545	-.3866
45.000	-.3368	-.3550	-.3943
90.000	-.3341	-.3404	-.3642
135.000	-.3354	-.3386	-.3533
180.000	-.3309	-.3339	-.3222
225.000	-.3381	-.3401	-.3371
270.000	-.3475	-.3478	-.3487
315.000	-.3580	-.3550	-.3564

ALPHAO(9) = 6.000 BETAO (1) = -9.980

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4309	-.4464	-.4413
45.000	-.4212	-.4419	-.4573
90.000	-.4154	-.4441	-.4663
135.000	-.4237	-.4428	-.4616
180.000	-.4362	-.4356	-.4346
225.000	-.4237	-.4345	-.4311
270.000	-.4194	-.4214	-.4156
315.000	-.4284	-.4344	-.4326

ALPHAO(9) = 5.930 BETAO (2) = -7.960

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4290	-.4280	-.4393
45.000	-.4112	-.4211	-.4410
90.000	-.4072	-.4288	-.4604
135.000	-.4159	-.4224	-.4405
180.000	-.4196	-.4236	-.4340
225.000	-.4186	-.4201	-.4229
270.000	-.4137	-.4169	-.3998
315.000	-.4119	-.4241	-.4290

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X31)

ALPHAO(9) = 5.960 BETAO (3) = -5.960

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4116	-.4178	-.4240
45.000	-.3994	-.4156	-.4362
90.000	-.4012	-.4203	-.4479
135.000	-.4037	-.4196	-.4313
180.000	-.4064	-.4094	-.4121
225.000	-.4064	-.4084	-.4054
270.000	-.4004	-.4074	-.3732
315.000	-.4054	-.4145	-.4129

ALPHAO(9) = 5.950 BETAO (4) = -3.970

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4071	-.4064	-.4156
45.000	-.3950	-.4079	-.4299
90.000	-.3841	-.4027	-.4366
135.000	-.3861	-.4044	-.4138
180.000	-.3898	-.3935	-.4082
225.000	-.3905	-.3950	-.4006
270.000	-.3868	-.3975	-.3640
315.000	-.3935	-.3950	-.4080

ALPHAO(9) = 5.940 BETAO (5) = -1.960

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3942	-.3952	-.4154
45.000	-.3819	-.3996	-.4284
90.000	-.3787	-.4024	-.4242
135.000	-.3721	-.3912	-.4064
180.000	-.3827	-.3849	-.3968
225.000	-.3772	-.3872	-.3853
270.000	-.3884	-.3979	-.3391
315.000	-.3939	-.3999	-.4052

ARC11-716 IA14 O1+T12+S12N25+AT10 SRM NOZZLE (RB1X31)

ALPHAO(9) = 5.940 BETAO (6) = .040

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3555	-.3610	-.3607
45.000	-.3497	-.3607	-.3972
90.000	-.3562	-.3547	-.3937
135.000	-.3530	-.3592	-.3722
180.000	-.3425	-.3650	-.3749
225.000	-.3662	-.3777	-.2984
270.000	-.3577	-.3512	-.2390
315.000	-.3570	-.4034	-.4018

ALPHAO(9) = 5.880 BETAO (7) = 2.060

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3656	-.3614	-.3629
45.000	-.3374	-.3547	-.3929
90.000	-.3374	-.3485	-.3795
135.000	-.3518	-.3478	-.3641
180.000	-.3485	-.3584	-.3720
225.000	-.3463	-.3679	-.2746
270.000	-.3505	-.3421	-.2152
315.000	-.3498	-.3894	-.3923

ALPHAO(9) = 5.990 BETAO (8) = 4.070

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3657	-.3681	-.3806
45.000	-.3532	-.3721	-.3955
90.000	-.3510	-.3584	-.3764
135.000	-.3500	-.3569	-.3724
180.000	-.3500	-.3520	-.3613
225.000	-.3584	-.3724	-.3632
270.000	-.3622	-.3868	-.3034
315.000	-.3677	-.3811	-.3796

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X31)

ALPHAD(9) = 5.990 BETAD (9) = 6.100

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9440	.9790	.9930
PHI			
.000	-.3528	-.3711	-.3875
45.000	-.3540	-.3761	-.3952
90.000	-.3433	-.3597	-.3759
135.000	-.3391	-.3473	-.3657
180.000	-.3540	-.3466	-.3462
225.000	-.3470	-.3550	-.3549
270.000	-.3545	-.3746	-.3351
315.000	-.3642	-.3726	-.3663

ALPHAD(9) = 6.020 BETAD (10) = 8.130

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3552	-.3664	-.3881
45.000	-.3503	-.3659	-.4032
90.000	-.3470	-.3582	-.3717
135.000	-.3386	-.3515	-.3652
180.000	-.3463	-.3441	-.3487
225.000	-.3451	-.3451	-.3554
270.000	-.3540	-.3610	-.3686
315.000	-.3647	-.3627	-.3629

ALPHAD(9) = 5.990 BETAD (11) = 10.150

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3433	-.3711	-.3919
45.000	-.3440	-.3572	-.4051
90.000	-.3381	-.3485	-.3646
135.000	-.3328	-.3433	-.3524
180.000	-.3301	-.3326	-.3322
225.000	-.3413	-.3450	-.3436
270.000	-.3457	-.3554	-.3600
315.000	-.3621	-.3644	-.3632

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB:X31)

ALPHAO(10) = 8.050 BETAO (1) = -9.970

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4314	-.4403	-.4369
45.000	-.4187	-.4284	-.4633
90.000	-.4249	-.4394	-.4668
135.000	-.4284	-.4374	-.4521
180.000	-.4363	-.4319	-.4343
225.000	-.4356	-.4317	-.4286
270.000	-.4214	-.4309	-.4190
315.000	-.4256	-.4292	-.4289

ALPHAO(10) = 8.000 BETAO (2) = -7.950

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4270	-.4300	-.4385
45.000	-.4161	-.4337	-.4447
90.000	-.4081	-.4270	-.4566
135.000	-.4313	-.4295	-.4422
180.000	-.4275	-.4315	-.4317
225.000	-.4173	-.4290	-.4220
270.000	-.4111	-.4158	-.4099
315.000	-.4231	-.4315	-.4309

ALPHAO(10) = 7.980 BETAO (3) = -5.950

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4162	-.4209	-.4276
45.000	-.4043	-.4234	-.4416
90.000	-.3978	-.4252	-.4408
135.000	-.4140	-.4237	-.4421
180.000	-.4229	-.4140	-.4119
225.000	-.4165	-.4140	-.4109
270.000	-.4043	-.4127	-.3864
315.000	-.4090	-.4147	-.4183

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X31)

ALPHAO(10) = 7.940 BETAO (4) = -3.970

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3989	-.4028	-.4153
45.000	-.3887	-.4088	-.4252
90.000	-.3894	-.4076	-.4374
135.000	-.3964	-.4013	-.4198
180.000	-.3936	-.3934	-.3936
225.000	-.3867	-.3979	-.3983
270.000	-.3904	-.3934	-.3997
315.000	-.3944	-.4061	-.4045

ALPHAO(10) = 7.940 BETAO (5) = -1.980

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3996	-.3991	-.4181
45.000	-.4084	-.3969	-.4356
90.000	-.4046	-.4044	-.4261
135.000	-.3899	-.4091	-.4094
180.000	-.3904	-.4146	-.3932
225.000	-.3864	-.4041	-.4105
270.000	-.4091	-.4099	-.3792
315.000	-.3954	-.4041	-.4034

ALPHAO(10) = 7.890 BETAO (6) = .030

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3962	-.3840	-.4320
45.000	-.3703	-.4172	-.4594
90.000	-.3982	-.4090	-.4462
135.000	-.3960	-.3765	-.4105
180.000	-.3905	-.4036	-.4083
225.000	-.3913	-.4070	-.3329
270.000	-.4100	-.4247	-.2755
315.000	-.4090	-.4152	-.4342

ARC11-716 IA14 D1+T12+S12N25+AT1D SRM NOZZLE (RB1X31)

ALPHAD(10) = 7.940 BETAD (7) = 2.060

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3768	-.3870	-.3821
45.000	-.3674	-.3848	-.4169
90.000	-.3679	-.3875	-.4162
135.000	-.3666	-.3631	-.3808
180.000	-.3557	-.3801	-.3836
225.000	-.3693	-.4077	-.3372
270.000	-.3621	-.3641	-.2281
315.000	-.3691	-.4125	-.4228

ALPHAD(10) = 9.010 BETAD (8) = 4.090

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3848	-.4013	-.4204
45.000	-.3793	-.3991	-.4226
90.000	-.3711	-.3841	-.4129
135.000	-.3686	-.3778	-.3891
180.000	-.3991	-.3713	-.3722
225.000	-.3726	-.3891	-.3759
270.000	-.3756	-.3966	-.3266
315.000	-.3951	-.3886	-.3918

ALPHAD(10) = 8.000 BETAD (9) = 6.120

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3785	-.3964	-.4088
45.000	-.3777	-.3859	-.4210
90.000	-.3730	-.3787	-.4083
135.000	-.3732	-.3737	-.3837
180.000	-.3638	-.3667	-.3666
225.000	-.3695	-.3727	-.3779
270.000	-.3782	-.3934	-.3698
315.000	-.3911	-.3961	-.3926

ARC11-716 IA14 D1+T12+S12N25+AT10 SRM NOZZLE (RB1X31)

ALPHAD(10) = 7.980 BETAD (10) = 8.120

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3792	-.3869	-.4130
45.000	-.3667	-.3779	-.4150
90.000	-.3654	-.3709	-.3866
135.000	-.3684	-.3809	-.3779
180.000	-.3659	-.3642	-.3663
225.000	-.3644	-.3564	-.3658
270.000	-.3702	-.3769	-.3762
315.000	-.3916	-.3951	-.3882

ALPHAD(10) = 7.950 BETAD (11) = 10.200

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3756	-.4022	-.4108
45.000	-.3649	-.3917	-.4328
90.000	-.3711	-.3811	-.4018
135.000	-.3784	-.3678	-.3771
180.000	-.3679	-.3598	-.3673
225.000	-.3714	-.3631	-.3628
270.000	-.3789	-.3803	-.3808
315.000	-.4002	-.3966	-.3922

ALPHAD(11) = 9.990 BETAD (1) = -9.930

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4312	-.4451	-.4449
45.000	-.4245	-.4354	-.4591
90.000	-.4183	-.4459	-.4650
135.000	-.4282	-.4464	-.4643
180.000	-.4424	-.4484	-.4480
225.000	-.4272	-.4459	-.4376
270.000	-.4287	-.4432	-.4253
315.000	-.4262	-.4332	-.4302

ARC11-716 IA14 OI+T12+S12N25+AT10 SRM NOZZLE (RB1X31)

ALPHAD(11) = 10.010 BETAD (2) = -7.910

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4375	-.4537	-.4567
45.000	-.4300	-.4502	-.4679
90.000	-.4342	-.4530	-.4821
135.000	-.4429	-.4590	-.4734
180.000	-.4532	-.4594	-.4551
225.000	-.4452	-.4487	-.4456
270.000	-.4315	-.4380	-.4268
315.000	-.4459	-.4457	-.4345

ALPHAD(11) = 9.920 BETAD (3) = -5.920

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4425	-.4558	-.4539
45.000	-.4321	-.4555	-.4724
90.000	-.4296	-.4537	-.4938
135.000	-.4393	-.4619	-.4786
180.000	-.4446	-.4499	-.4534
225.000	-.4363	-.4440	-.4447
270.000	-.4378	-.4430	-.4184
315.000	-.4398	-.4409	-.4368

ALPHAD(11) = 9.940 BETAD (4) = -3.950

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4389	-.4546	-.4539
45.000	-.4421	-.4571	-.4922
90.000	-.4321	-.4492	-.4889
135.000	-.4356	-.4474	-.4682
180.000	-.4396	-.4464	-.4486
225.000	-.4344	-.4417	-.4436
270.000	-.4311	-.4344	-.4174
315.000	-.4431	-.4459	-.4406

ARC11-716 IA14 01+T12+912N25+AT10 SRM NOZZLE (RB1X31)

ALPHAD(11) = 9.940 BETAD (5) = -1.960

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4243	-.4458	-.4540
45.000	-.4263	-.4403	-.4772
90.000	-.4219	-.4418	-.4862
135.000	-.4273	-.4351	-.4450
180.000	-.4296	-.4383	-.4268
225.000	-.4199	-.4306	-.4283
270.000	-.4303	-.4371	-.4047
315.000	-.4343	-.4363	-.4350

ALPHAD(11) = 9.880 BETAD (6) = .040

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4279	-.4366	-.4463
45.000	-.4222	-.4321	-.4601
90.000	-.4222	-.4299	-.4665
135.000	-.4172	-.4311	-.4257
180.000	-.4259	-.4247	-.4162
225.000	-.4110	-.4257	-.4246
270.000	-.4127	-.4302	-.3787
315.000	-.4187	-.4232	-.4403

ALPHAD(11) = 9.960 BETAD (7) = 2.070

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4035	-.4236	-.4302
45.000	-.3952	-.4092	-.4501
90.000	-.3897	-.4060	-.4464
135.000	-.4025	-.3980	-.4112
180.000	-.4017	-.3977	-.4016
225.000	-.3987	-.4072	-.3914
270.000	-.3990	-.4175	-.3962
315.000	-.4072	-.3962	-.4155

ARC11-716 IA14 01+T12+S12N25+AT1D SRM NOZZLE (RB1X31)

ALPHAO(11) = 9.990 BETAO (8) = 4.110

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3764	-.3833	-.4076
45.000	-.3681	-.3806	-.4181
90.000	-.3779	-.3854	-.3994
135.000	-.3739	-.3797	-.3752
180.000	-.3684	-.3812	-.3762
225.000	-.3642	-.3702	-.3401
270.000	-.3741	-.3799	-.3930
315.000	-.3784	-.3899	-.3856

ALPHAO(11) = 9.980 BETAO (9) = 6.130

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3636	-.3875	-.4064
45.000	-.3454	-.3858	-.4127
90.000	-.3543	-.3743	-.3992
135.000	-.3748	-.3770	-.3773
180.000	-.3641	-.3690	-.3583
225.000	-.3511	-.3663	-.3486
270.000	-.3603	-.3616	-.3551
315.000	-.3796	-.3833	-.3777

ALPHAO(11) = 10.030 BETAO (10) = 8.170

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3654	-.3928	-.4115
45.000	-.3604	-.3873	-.4137
90.000	-.3711	-.3866	-.3973
135.000	-.3823	-.3858	-.3729
180.000	-.3731	-.3739	-.3723
225.000	-.3728	-.3724	-.3636
270.000	-.3728	-.3811	-.3661
315.000	-.3693	-.3873	-.3879

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X31)

ALPHA3(11) = 10.050 BETA3 (11) = 10.230

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3698	-.3862	-.4046
45.000	-.3565	-.3927	-.4078
90.000	-.3660	-.3733	-.3883
135.000	-.3777	-.3693	-.3638
180.000	-.3708	-.3583	-.3731
225.000	-.3680	-.3658	-.3654
270.000	-.3747	-.3826	-.3701
315.000	-.3857	-.3781	-.3825

ARC11-716 IA14 01+T12+S12N25+AT1D SRM NOZZLE (RB1X32) (17 APR 74)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES
LREF = 38.7090 INCHES YMRP = .0000 INCHES
BREF = 38.7090 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 1.100 ELEVON = .000
RUDDER = .000 SPDBRK = .000

ALPHAO(1) = -10.240 BETAO (1) = -9.900

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.5599	-.5722	-.5724
45.000	-.5589	-.5630	-.5706
90.000	-.5570	-.5641	-.5711
135.000	-.5521	-.5630	-.5704
180.000	-.5531	-.5651	-.5575
225.000	-.5521	-.5623	-.5544
270.000	-.5560	-.5620	-.5518
315.000	-.5544	-.5756	-.5406

ALPHAO(1) = -10.220 BETAO (2) = -7.890

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.5529	-.5644	-.5628
45.000	-.5471	-.5531	-.5697
90.000	-.5463	-.5558	-.5657
135.000	-.5453	-.5558	-.5639
180.000	-.5479	-.5547	-.5525
225.000	-.5521	-.5521	-.5504
270.000	-.5437	-.5544	-.5496
315.000	-.5502	-.5644	-.5394

ALPHAO(1) = -10.220 BETAO (3) = -5.900

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.5471	-.5503	-.5579
45.000	-.5489	-.5476	-.5626
90.000	-.5395	-.5516	-.5621
135.000	-.5405	-.5513	-.5595
180.000	-.5400	-.5497	-.5480
225.000	-.5395	-.5484	-.5368

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X32)

ALPHA0(1) = -10.220 BETA0 (3) = -5.900

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
270.000	-.5403	-.5487	-.5323
315.000	-.5471	-.5576	-.5441

ALPHA0(1) = -10.230 BETA0 (4) = -3.930

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.5485	-.5613	-.5637
45.000	-.5519	-.5653	-.5714
90.000	-.5487	-.5630	-.5756
135.000	-.5532	-.5627	-.5698
180.000	-.5540	-.5585	-.5491
225.000	-.5508	-.5543	-.5530
270.000	-.5511	-.5714	-.4756
315.000	-.5587	-.5727	-.5783

ALPHA0(1) = -10.230 BETA0 (5) = -1.940

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.5465	-.5560	-.5591
45.000	-.5439	-.5591	-.5728
90.000	-.5444	-.5570	-.5670
135.000	-.5460	-.5492	-.5591
180.000	-.5492	-.5447	-.5401
225.000	-.5476	-.5486	-.5500
270.000	-.5486	-.5610	-.4159
315.000	-.5518	-.5623	-.5636

ARC11-715 IA14 C1+T12+S12N25+AT1D SRM NOZZLE (RB1X32)

ALPHA0(1) = -10.240 BETA0 (6) = .030

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.5329	-.5344	-.5412
45.000	-.5329	-.5407	-.5583
90.000	-.5258	-.5378	-.5530
135.000	-.5263	-.5368	-.5410
180.000	-.5297	-.5274	-.5162
225.000	-.5245	-.5350	-.5336
270.000	-.5261	-.5428	-.4012
315.000	-.5292	-.5373	-.5378

ALPHA0(1) = -10.250 BETA0 (7) = 2.040

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE C

X/LS	.9480	.9790	.9930
PHI			
.000	-.4879	-.4931	-.4991
45.000	-.4873	-.4931	-.5140
90.000	-.4871	-.4970	-.5289
135.000	-.4876	-.5009	-.5070
180.000	-.5012	-.5033	-.4971
225.000	-.4871	-.5171	-.4562
270.000	-.4881	-.4991	-.3950
315.000	-.4944	-.4934	-.4981

ALPHA0(1) = -10.260 BETA0 (8) = 4.030

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4389	-.4475	-.4660
45.000	-.4256	-.4389	-.4584
90.000	-.4259	-.4402	-.4522
135.000	-.4358	-.4290	-.4449
180.000	-.4251	-.4345	-.4403
225.000	-.4345	-.4452	-.3864
270.000	-.4337	-.4644	-.4187
315.000	-.4483	-.4535	-.4543

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X32)

ALPHAO(1) = -10.250 BETAO (9) = 6.090

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3948	-.4164	-.4320
45.000	-.3948	-.4068	-.4370
90.000	-.4005	-.4012	-.4122
135.000	-.4060	-.3952	-.4075
180.000	-.4016	-.4010	-.3980
225.000	-.3919	-.3921	-.3920
270.000	-.4050	-.4172	-.4131
315.000	-.4191	-.4229	-.4237

ALPHAO(1) = -10.240 BETAO (10) = 8.120

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3814	-.3916	-.4123
45.000	-.3699	-.3945	-.4159
90.000	-.3927	-.3992	-.4094
135.000	-.3984	-.3919	-.3963
180.000	-.3843	-.3848	-.3856
225.000	-.3801	-.3801	-.3695
270.000	-.3783	-.3819	-.3807
315.000	-.3879	-.3927	-.3846

ALPHAO(1) = -10.250 BETAO (11) = 10.110

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3899	-.3957	-.4123
45.000	-.3790	-.3959	-.4186
90.0	-.3928	-.4011	-.4199
135.000	-.4097	-.4032	-.4058
180.000	-.4053	-.4014	-.4095
225.000	-.3959	-.3907	-.3804
270.000	-.3855	-.3860	-.3830
315.000	-.3865	-.3844	-.3822

ARC11-716 IA14 OI+T12+S12N25+AT10 SRM NOZZLE (R81X32)

ALPHAD(2) = -8.190 BETAD (1) = -9.970

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.5397	-.5564	-.5587
45.000	-.5412	-.5544	-.5623
90.000	-.5438	-.5515	-.5541
135.000	-.5423	-.5494	-.5580
180.000	-.5420	-.5505	-.5456
225.000	-.5461	-.5484	-.5436
270.000	-.5487	-.5497	-.5464
315.000	-.5500	-.5556	-.5469

ALPHAD(2) = -8.200 BETAD (2) = -7.960

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.5412	-.5469	-.5463
45.000	-.5392	-.5425	-.5509
90.000	-.5324	-.5411	-.5514
135.000	-.5324	-.5372	-.5509
180.000	-.5311	-.5434	-.5402
225.000	-.5374	-.5375	-.5377
270.000	-.5348	-.5416	-.5374
315.000	-.5397	-.5507	-.5382

ALPHAD(2) = -8.210 BETAD (3) = -5.960

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.5273	-.5346	-.5415
45.000	-.5304	-.5346	-.5495
90.000	-.5270	-.5374	-.5493
135.000	-.5302	-.5381	-.5457
180.000	-.5302	-.5358	-.5370
225.000	-.5304	-.5348	-.5349
270.000	-.5276	-.5348	-.5321
315.000	-.5314	-.5428	-.5429

ARC11-716 IA14 O1+T12+S12N25+AT10 SRM NOZZLE (RB1X32)

ALPHAS(2) = -8.220 BETAO (4) = -1.980

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.5340	-.5395	-.5493
45.000	-.5333	-.5400	-.5565
90.000	-.5307	-.5425	-.5588
135.000	-.5322	-.5379	-.5495
180.000	-.5320	-.5340	-.5326
225.000	-.5327	-.5327	-.5337
270.000	-.5397	-.5505	-.4257
315.000	-.5402	-.5436	-.5448

ALPHAS(2) = -8.150 BETAO (5) = .010

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.5103	-.5158	-.5220
45.000	-.5116	-.5186	-.5370
90.000	-.5062	-.5228	-.5396
135.000	-.5093	-.5194	-.5251
180.000	-.5129	-.5176	-.5146
225.000	-.5080	-.5145	-.5144
270.000	-.5075	-.5259	-.4083
315.000	-.5168	-.5145	-.5190

ALPHAS(2) = -8.190 BETAO (6) = 2.040

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4825	-.4927	-.4902
45.000	-.4821	-.4914	-.5093
90.000	-.4803	-.4977	-.5176
135.000	-.4888	-.4899	-.5059
180.000	-.4922	-.4868	-.4937
225.000	-.4865	-.5015	-.4844
270.000	-.4813	-.4958	-.3908
315.000	-.4849	-.4824	-.4921

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X32)

ALPHAO(2) = -8.240 BETAO (7) = 4.040

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4243	-.4201	-.4300
45.000	-.4112	-.4217	-.4376
90.000	-.4110	-.4196	-.4248
135.000	-.4110	-.4136	-.4123
180.000	-.4034	-.4073	-.4100
225.000	-.4029	-.4128	-.3537
270.000	-.4091	-.4365	-.4001
315.000	-.4217	-.4311	-.4199

ALPHAO(2) = -8.220 BETAO (8) = 6.070

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3742	-.3906	-.4039
45.000	-.3677	-.3870	-.4146
90.000	-.3781	-.3822	-.3947
135.000	-.3904	-.3796	-.3833
180.000	-.3812	-.3767	-.3724
225.000	-.3731	-.3640	-.3667
270.000	-.3745	-.3809	-.3805
315.000	-.3979	-.4010	-.3969

ALPHAO(2) = -8.230 BETAO (9) = 8.080

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3845	-.3968	-.4149
45.000	-.3649	-.3960	-.4146
90.000	-.3866	-.3981	-.4068
135.000	-.4012	-.3937	-.3971
180.000	-.3921	-.3879	-.3910
225.000	-.3777	-.3783	-.3714
270.000	-.3829	-.3825	-.3811
315.000	-.3863	-.3945	-.3801

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X32)

ALPHAO(2) = -8.240 BETAO (10) = 10.100

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3920	-.3996	-.4129
45.000	-.3868	-.4069	-.4264
90.000	-.3962	-.4157	-.4217
135.000	-.4189	-.4126	-.4139
180.000	-.4116	-.4123	-.4132
225.000	-.3941	-.3982	-.3864
270.000	-.3902	-.3930	-.3955
315.000	-.3912	-.3946	-.3875

ALPHAO(3) = -6.210 BETAO (1) = -10.020

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.5301	-.5436	-.5475
45.000	-.5389	-.5405	-.5527
90.000	-.5332	-.5402	-.5467
135.000	-.5291	-.5384	-.5444
180.000	-.5358	-.5418	-.5395
225.000	-.5317	-.5405	-.5380
270.000	-.5345	-.5348	-.5367
315.000	-.5438	-.5459	-.5421

ALPHAO(3) = -6.220 BETAO (2) = -7.960

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.5195	-.5303	-.5352
45.000	-.5190	-.5229	-.5399
90.000	-.5190	-.5277	-.5417
135.000	-.5185	-.5295	-.5360
180.000	-.5208	-.5236	-.5179
225.000	-.5197	-.5259	-.5218
270.000	-.5156	-.5259	-.5228
315.000	-.5205	-.5316	-.5275

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X32)

ALPHA(3) = -6.230 BETA (3) = -5.960

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.5143	-.5239	-.5314
45.000	-.5190	-.5257	-.5337
90.000	-.5146	-.5260	-.5378
135.000	-.5131	-.5275	-.5296
180.000	-.5211	-.5249	-.5273
225.000	-.5182	-.5257	-.5195
270.000	-.5187	-.5213	-.5177
315.000	-.5213	-.5293	-.5278

ALPHA(3) = -6.120 BETA (4) = -1.980

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.5157	-.5227	-.5322
45.000	-.5178	-.5289	-.5397
90.000	-.5167	-.5278	-.5358
135.000	-.5146	-.5232	-.5335
180.000	-.5180	-.5214	-.5178
225.000	-.5185	-.5193	-.5221
270.000	-.5185	-.5346	-.4399
315.000	-.5216	-.5250	-.5252

ALPHA(3) = -6.130 BETA (5) = .000

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4980	-.5089	-.5095
45.000	-.4955	-.5063	-.5204
90.000	-.4968	-.5095	-.5256
135.000	-.4991	-.5095	-.5129
180.000	-.5017	-.5044	-.4982
225.000	-.4982	-.5013	-.5038
270.000	-.4957	-.5127	-.4135
315.000	-.5019	-.5018	-.5033

ARC11-715 I414 CR+C12+S12N25+AT10 SRM NOZZLE (RB1X32)

ALPHA(5) = -6.120 BETA (6) = 2.030

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4652	-.4727	-.4790
45.000	-.4730	-.4799	-.4875
90.000	-.4704	-.4831	-.4975
135.000	-.4709	-.4764	-.4904
180.000	-.4758	-.4831	-.4956
225.000	-.4719	-.4875	.4837
270.000	-.4740	-.4868	.5091
315.000	-.4722	-.4815	-.4785

ALPHA(5) = -6.110 BETA (7) = 4.060

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4102	-.4206	-.4327
45.000	-.4172	-.4177	-.4350
90.000	-.4074	-.4101	-.4254
135.000	-.4066	-.4091	-.4176
180.000	-.4089	-.4143	-.4164
225.000	-.4071	-.4060	-.3857
270.000	-.4068	-.4259	-.4053
315.000	-.4180	-.4265	-.4234

ALPHA(5) = -6.190 BETA (8) = 6.080

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3870	-.4017	-.4118
45.000	-.3720	-.3940	-.4198
90.000	-.3831	-.3875	-.4092
135.000	-.3873	-.3852	-.3978
180.000	-.3839	-.3859	-.3835
225.000	-.3821	-.3772	-.3719
270.000	-.3829	-.3878	-.3879
315.000	-.3997	-.4053	-.3953

ARC11-716 IA14 OI+T12+S12N25+AT10 SRM NOZZLE (RB1X32)

ALPHA0(3) = -6.190 BETA0 (9) = 8.090

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9400	.9790	.9930
PHI			
.000	-.3849	-.3978	-.4097
45.000	-.3730	-.4046	-.4190
90.000	-.3867	-.4012	-.4128
135.000	-.4051	-.3934	-.3989
180.000	-.3973	-.3958	-.3899
225.000	-.3868	-.3865	-.3788
270.000	-.3803	-.3862	-.3788
315.000	-.3911	-.3953	-.3922

ALPHA0(3) = -6.170 BETA0 (10) = 10.090

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9400	.9790	.9930
PHI			
.000	-.3986	-.41[illegible]	-.4127
45.000	-.3903	-.4146	-.4350
90.000	-.3986	-.4148	-.4330
135.000	-.4167	-.4120	-.4169
180.000	-.4219	-.4125	-.4111
225.000	-.4038	-.4104	-.3969
270.000	-.3955	-.4016	-.4057
315.000	-.4048	-.4022	-.3980

ALPHA0(4) = -4.840 BETA0 (1) = -10.010

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9400	.9790	.9930
PHI			
.000	-.5269	-.5371	-.5345
45.000	-.5214	-.5355	-.5392
90.000	-.5248	-.5319	-.5415
135.000	-.5269	-.528[illegible]	-.5371
180.000	-.5289	-.5308	-.5317
225.000	-.5293	-.5308	-.5195
270.000	-.5253	-.5324	-.5206
315.000	-.5298	-.5319	-.5434

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X32)

ALPHAO(4) = -4.270 BETAO (2) = -8.020

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.5085	-.5221	-.5270
45.000	-.5101	-.5195	-.5288
90.000	-.5111	-.5213	-.5270
135.000	-.5121	-.5192	-.5249
180.000	-.5103	-.5155	-.5143
225.000	-.5121	-.5132	-.5114
270.000	-.5140	-.5218	-.5138
315.000	-.5174	-.5257	-.5257

ALPHAO(4) = -4.290 BETAO (3) = -5.970

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.5131	-.5225	-.5272
45.000	-.5126	-.5257	-.5299
90.000	-.5129	-.5207	-.5267
135.000	-.5123	-.5197	-.5278
180.000	-.5126	-.5215	-.5173
225.000	-.5121	-.5181	-.5115
270.000	-.5097	-.5105	-.5066
315.000	-.5142	-.5254	-.5162

ALPHAO(4) = -4.250 BETAO (4) = -3.970

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.5125	-.5216	-.5255
45.000	-.5140	-.5200	-.5318
90.000	-.5106	-.5240	-.5331
135.000	-.5156	-.5224	-.5300
180.000	-.5182	-.5224	-.5166
225.000	-.5177	-.5219	-.5161
270.000	-.5133	-.5224	-.4712
315.000	-.5166	-.5208	-.5231

ARC11-716 IA14 O1+T12+S12N25+AT10 SRM NOZZLE (RB1X32)

ALPHAO(4) = -4.240 BETAO (5) = -1.960

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.5038	-.5067	-.5163
45.000	-.5043	-.5114	-.5215
90.000	-.5033	-.5095	-.5291
135.000	-.5025	-.5098	-.5228
180.000	-.5038	-.5098	-.5102
225.000	-.5043	-.5048	-.5066
270.000	-.5074	-.5132	-.4562
315.000	-.5048	-.5103	-.5112

ALPHAO(4) = -4.220 BETAO (6) = .020

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4865	-.4944	-.4988
45.000	-.4865	-.4952	-.5084
90.000	-.4892	-.4988	-.5168
135.000	-.4881	-.4993	-.5056
180.000	-.4889	-.5006	-.4933
225.000	-.4907	-.5009	-.5006
270.000	-.4871	-.5001	-.3927
315.000	-.4889	-.4923	-.4954

ALPHAO(4) = -4.290 BETAO (7) = 2.020

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4605	-.4662	-.4720
45.000	-.4552	-.4691	-.4819
90.000	-.4662	-.4712	-.4900
135.000	-.4568	-.4720	-.4798
180.000	-.4588	-.4757	-.4706
225.000	-.4675	-.4822	-.4758
270.000	-.4662	-.4773	-.3988
315.000	-.4652	-.4584	-.4737

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X32)

ALPHA0(4) = -4.310 BETA0 (8) = 4.040

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4114	-.4205	-.4343
45.000	-.4041	-.4176	-.4304
90.000	-.4077	-.4077	-.4158
135.000	-.4051	-.4101	-.4163
180.000	-.4051	-.4028	-.4061
225.000	-.4129	-.4192	-.3939
270.000	-.4119	-.4319	-.3890
315.000	-.4197	-.4262	-.4209

ALPHA0(4) = -4.220 BETA0 (9) = 8.080

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3881	-.3999	-.4096
45.000	-.3811	-.3991	-.4264
90.000	-.3860	-.4020	-.4170
135.000	-.3926	-.3923	-.4023
180.000	-.3947	-.3939	-.3832
225.000	-.3887	-.3918	-.3823
270.000	-.3829	-.3887	-.3812
315.000	-.3939	-.3991	-.3812

ALPHA0(4) = -4.210 BETA0 (10) = 10.100

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4082	-.4174	-.4237
45.000	-.3975	-.4174	-.4469
90.000	-.3949	-.4148	-.4419
135.000	-.4106	-.4145	-.4216
180.000	-.4161	-.4122	-.4123
225.000	-.4085	-.4122	-.4045
270.000	-.4004	-.4054	-.4024
315.000	-.4022	-.4137	-.4017

ARC11-716 IA14 O1+T12+S12N25+AT10 SRM NOZZLE (RB1X32)

ALPHAO(5) = -2.920 BETAO (1) = -10.000

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.5223	-.5317	-.5351
45.000	-.5207	-.5288	-.5351
90.000	-.5184	-.5304	-.5351
135.000	-.5228	-.5317	-.5309
180.000	-.5223	-.5275	-.5193
225.000	-.5223	-.5223	-.5180
270.000	-.5275	-.5367	-.5092
315.000	-.5338	-.5377	-.5403

ALPHAO(5) = -2.930 BETAO (2) = -8.000

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.5111	-.5166	-.5231
45.000	-.5114	-.5166	-.5262
90.000	-.5108	-.5166	-.5220
135.000	-.5054	-.5134	-.5231
180.000	-.5082	-.5114	-.5144
225.000	-.5082	-.5098	-.5043
270.000	-.5085	-.5181	-.4955
315.000	-.5134	-.5215	-.5264

ALPHAO(5) = -2.930 BETAO (3) = -5.970

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.5061	-.5168	-.5168
45.000	-.5058	-.5110	-.5186
90.000	-.5050	-.5087	-.5160
135.000	-.5053	-.5139	-.5194
180.000	-.5050	-.5095	-.5091
225.000	-.5053	-.5116	-.5050
270.000	-.5048	-.5108	-.4972
315.000	-.5069	-.5118	-.5151

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X32)

ALPHAO(5) = -2.910 BETAO (4) = -3.960

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.5012	-.5064	-.5145
45.000	-.5041	-.5101	-.5169
90.000	-.5022	-.5124	-.5245
135.000	-.5020	-.5145	-.5216
180.000	-.5043	-.5143	-.5074
225.000	-.5046	-.5135	-.5045
270.000	-.5030	-.5101	-.4656
315.000	-.5059	-.5138	-.5165

ALPHAO(5) = -2.910 BETAO (5) = -2.000

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4925	-.4988	-.5066
45.000	-.4925	-.5004	-.5113
90.000	-.4925	-.5061	-.5118
135.000	-.4928	-.5040	-.5087
180.000	-.4978	-.5017	-.4977
225.000	-.4944	-.5024	-.4969
270.000	-.4946	-.5069	-.4426
315.000	-.4962	-.5022	-.5065

ALPHAO(5) = -2.910 BETAO (6) = .020

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4852	-.4889	-.4952
45.000	-.4847	-.4962	-.5059
90.000	-.4847	-.4957	-.5103
135.000	-.4844	-.4975	-.5069
180.000	-.4899	-.4991	-.4904
225.000	-.4920	-.5004	-.4959
270.000	-.4878	-.5035	-.3918
315.000	-.4868	-.4915	-.4928

ARC11-716 IA14 C1+T12+C12N25+AT10 SRM NOZZLE (RB1X32)

ALPHAO(5) = -2.910 BETAO (7) = 2.050

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4610	-.4782	-.4772
45.000	-.4678	-.4803	-.4845
90.000	-.4678	-.4790	-.4897
135.000	-.4660	-.4780	-.4856
180.000	-.4714	-.4798	-.4724
225.000	-.4678	-.4827	-.4815
270.000	-.4733	-.4869	-.3792
315.000	-.4699	-.4801	-.4758

ALPHAO(5) = -2.920 BETAO (8) = 4.080

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4370	-.4469	-.4607
45.000	-.4333	-.4472	-.4584
90.000	-.4325	-.4383	-.4427
135.000	-.4338	-.4375	-.4438
180.000	-.4325	-.4385	-.4319
225.000	-.4354	-.4378	-.4392
270.000	-.4406	-.4472	-.4355
315.000	-.4459	-.4477	-.4449

ALPHAO(5) = -2.930 BETAO (9) = 6.070

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4085	-.4172	-.4297
45.000	-.4010	-.4174	-.4363
90.000	-.4064	-.4159	-.4263
135.000	-.4114	-.4133	-.4169
180.000	-.4138	-.4094	-.4042
225.000	-.4041	-.4012	-.3990
270.000	-.4085	-.4096	-.4141
315.000	-.4166	-.4154	-.4165

ARC11-716 IA14 O1+T12+S12N2 AT10 SRM NOZZLE (R81X32)

ALPHAO(5) = -2.920 BETAO (10) = 8.110

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3798	-.3936	-.3994
45.000	-.3803	-.3938	-.4125
90.000	-.3798	-.3968	-.4117
135.000	-.3928	-.3950	-.4010
180.000	-.3938	-.3924	-.3848
225.000	-.3829	-.3898	-.3866
270.000	-.3824	-.3793	-.3830
315.000	-.3850	-.3856	-.3825

ALPHAO(5) = -2.900 BETAO (11) = 10.100

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4092	-.4149	-.4212
45.000	-.4001	-.4188	-.4446
90.000	-.3988	-.4128	-.4368
135.000	-.4087	-.4115	-.4230
180.000	-.4121	-.4126	-.4099
225.000	-.4042	-.4073	-.4053
270.000	-.4053	-.4076	-.4123
315.000	-.4074	-.4149	-.4133

ALPHAO(6) = -.750 BETAO (1) = -10.040

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.5243	-.5303	-.5406
45.000	-.5245	-.5356	-.5353
90.000	-.5258	-.5308	-.5387
135.000	-.5168	-.5295	-.5287
180.000	-.5211	-.5290	-.5209
225.000	-.5240	-.5274	-.5222
270.000	-.5251	-.5366	-.5128
315.000	-.5324	-.5385	-.5363

ARC11-716 IA14 O1+T12+S12N25+AT10 SRM NOZZLE (RB1X32)

ALPHAO(6) = -.740 BETAO (2) = -8.040

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3210	-.5221	-.5312
45.000	-.5067	-.5158	-.5276
90.000	-.5124	-.5176	-.5263
135.000	-.5093	-.5155	-.5231
180.000	-.5095	-.5121	-.5196
225.000	-.5101	-.5145	-.5104
270.000	-.5148	-.5291	-.4618
315.000	-.5210	-.5281	-.5315

ALPHAO(6) = -.720 BETAO (3) = -5.990

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.5047	-.5097	-.5102
45.000	-.5024	-.5110	-.5181
90.000	-.5003	-.5071	-.5212
135.000	-.4985	-.5084	-.5176
180.000	-.5003	-.5073	-.5075
225.000	-.5003	-.5042	-.5033
270.000	-.5019	-.5123	-.4625
315.000	-.5045	-.5123	-.5140

ALPHAO(6) = -.710 BETAO (4) = -3.980

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4910	-.5001	-.5045
45.000	-.4894	-.4990	-.5094
90.000	-.4869	-.4982	-.5071
135.000	-.4913	-.5011	-.5074
180.000	-.4946	-.4985	-.5013
225.000	-.4923	-.4972	-.4997
270.000	-.4928	-.5100	-.4357
315.000	-.4907	-.5016	-.5088

ARC11-716 IA14 D1+T12+S12N25+AT1D SRM NOZZLE (RB1X32)

ALPHA0(6) = -.700 BETA0 (5) = -2.010

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4856	-.4911	-.4963
45.000	-.4858	-.4953	-.5028
90.000	-.4861	-.4916	-.5062
135.000	-.4864	-.4927	-.5031
180.000	-.4877	-.4909	-.4910
225.000	-.4877	-.4935	-.4944
270.000	-.4856	-.5041	-.4179
315.000	-.4858	-.4971	-.5026

ALPHA0(6) = -.090 BETA0 (6) = .040

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4805	-.4786	-.4899
45.000	-.4799	-.4862	-.4956
90.000	-.4792	-.4862	-.5003
135.000	-.4794	-.4836	-.4977
180.000	-.4789	-.4825	-.4879
225.000	-.4794	-.4852	-.4917
270.000	-.4794	-.4940	-.3685
315.000	-.4789	-.4865	-.4935

ALPHA0(6) = -.690 BETA0 (7) = 2.030

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4662	-.4691	-.4744
45.000	-.4665	-.4681	-.4708
90.000	-.4668	-.4695	-.4851
135.000	-.4668	-.4661	-.4807
180.000	-.4662	-.4697	-.4748
225.000	-.4673	-.4725	-.4740
270.000	-.4616	-.4735	-.4129
315.000	-.4642	-.4653	-.4740

ARC11-710 :A14 01+T12+S12N25+aT10 SRM NOZZLE (RB1X32)

ALPHA0(6) = -.710 BETA0 (8) = 4.060

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4204	-.4225	-.4358
45.000	-.4164	-.4353	-.4473
90.000	-.4164	-.4290	-.4460
135.000	-.4183	-.4219	-.4353
180.000	-.4203	-.4235	-.4199
225.000	-.4236	-.4332	-.4158
270.000	-.4198	-.4537	-.3762
315.000	-.4230	-.4287	-.4225

ALPHA0(6) = -.720 BETA0 (9) = 6.080

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3849	-.4131	-.4180
45.000	-.3956	-.4079	-.4301
90.000	-.3979	-.4087	-.4272
135.000	-.4058	-.4115	-.4105
180.000	-.4086	-.4053	-.4026
225.000	-.3969	-.4019	-.4050
270.000	-.3965	-.3964	-.3974
315.000	-.4005	-.4050	-.4029

ALPHA0(6) = -.730 BETA0 (10) = 8.100

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3959	-.3987	-.4096
45.000	-.3886	-.4052	-.4229
90.000	-.3850	-.4049	-.4190
135.000	-.3959	-.4026	-.4075
180.000	-.4037	-.3992	-.3998
225.000	-.3946	-.3956	-.3933
270.000	-.3930	-.3948	-.3935
315.000	-.3974	-.4021	-.3954

ARC11-716 IA1- 01+T12+S12N25+AT10 SRM NOZZLE (RB1x32)

ALPHAO(6) = -.740 BETAO (11) = 10.160

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4063	.4248	-.4233
45.000	-.4071	-.4248	-.4418
90.000	-.3979	-.4160	-.4319
135.000	-.4003	-.4126	-.4230
180.000	-.4089	-.4121	-.4118
225.000	-.4024	-.4077	-.4079
270.000	-.4081	-.4056	-.4084
315.000	-.4136	-.4152	-.4064

ALPHAO(7) = 2.030 BETAO (1) = -10.000

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.5093	-.5180	-.5261
45.000	-.5078	-.5198	-.5253
90.000	-.5059	-.5155	-.5229
135.000	-.5114	-.5154	-.5211
180.000	-.5143	-.5219	-.5092
225.000	-.5140	-.5132	-.5100
270.000	-.5119	-.5193	-.5047
315.000	-.5185	-.5193	-.5230

ALPHAO(7) = 2.080 BETAO (2) = -8.030

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.5095	-.5178	-.5306
45.000	-.5132	-.5175	-.5277
90.000	-.5148	-.5144	-.5253
135.000	-.5066	-.5128	-.5153
180.000	-.5100	-.5097	-.5084
225.000	-.5144	-.5068	-.5022
270.000	-.5089	-.5144	-.4674
315.000	-.5126	-.5217	-.5237

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X32)

ALPHA0(7) = 2.000 BETA0 (3) = -5.990

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4978	-.5038	-.5156
45.000	-.4951	-.5018	-.5171
90.000	-.4978	-.4999	-.5153
135.000	-.4937	-.5038	-.5164
180.000	-.4984	-.5030	-.5046
225.000	-.4950	-.5030	-.4992
270.000	-.5002	-.5177	-.4245
315.000	-.5012	-.5153	-.5166

ALPHA0(7) = 1.940 BETA0 (4) = -4.010

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4859	-.4924	-.4958
45.000	-.4835	-.4921	-.4984
90.000	-.4815	-.4877	-.5015
135.000	-.4815	-.4909	-.4997
180.000	-.4864	-.4893	-.4937
225.000	-.4860	-.4870	-.4911
270.000	-.4846	-.4990	-.4259
315.000	-.4888	-.4940	-.4950

ALPHA0(7) = 1.950 BETA0 (5) = -2.000

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4664	-.4729	-.4833
45.000	-.4666	-.4737	-.4874
90.000	-.4651	-.4728	-.4861
135.000	-.4690	-.4786	-.4864
180.000	-.4737	-.4779	-.4803
225.000	-.4739	-.4755	-.4780
270.000	-.4716	-.4795	-.4285
315.000	-.4692	-.4768	-.4769

4RC11-716 IA14 OI+T12+S12N25+AT10 SRM NOZZLE (RB1X32)

ALPHA0(7) = 1.890 BETA0 (6) = .040

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4573	-.4615	-.4717
45.000	-.4557	-.4641	-.4693
90.000	-.4565	-.4636	-.4759
135.000	-.4581	-.4665	-.4795
180.000	-.4649	-.4654	-.4683
225.000	-.4649	-.4691	-.4694
270.000	-.4578	-.4714	-.3866
315.000	-.4573	-.4618	-.4668

ALPHA0(7) = 1.930 BETA0 (7) = 2.030

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4507	-.4559	-.4625
45.000	-.4489	-.4590	-.4610
90.000	-.4494	-.4560	-.4643
135.000	-.4507	-.4552	-.4564
180.000	-.4575	-.4597	-.4602
225.000	-.4536	-.4581	-.4636
270.000	-.4471	-.4602	-.4083
315.000	-.4499	-.4547	-.4575

ALPHA0(7) = 1.930 BETA0 (8) = 4.070

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4466	-.4631	-.4802
45.000	-.4422	-.4610	-.4696
90.000	-.4484	-.4555	-.4670
135.000	-.4492	-.4526	-.4605
180.000	-.4479	-.4534	-.4516
225.000	-.4492	-.4485	-.4490
270.000	-.4484	-.4555	-.4381
315.000	-.4523	-.4529	-.4508

ARC11-716 IA14 O8+T12+S12N25+AT10 SRM NOZZLE (RB1X32)

ALPHAO(7) = 1.980 BETAO (9) = 6.100

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4408	-.4442	-.4806
45.000	-.4358	-.4478	-.4645
90.000	-.4397	-.4491	-.4561
135.000	-.4439	-.4512	-.4504
180.000	-.4442	-.4501	-.4439
225.000	-.4379	-.4428	-.4426
270.000	-.4353	-.4389	-.4452
315.000	-.4421	-.4402	-.4449

ALPHAO(7) = 1.950 BETAO (10) = 8.100

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4116	-.4163	-.4298
45.000	-.4061	-.4199	-.4438
90.000	-.4012	-.4129	-.4308
135.000	-.4087	-.4168	-.4225
180.000	-.4082	-.4157	-.4132
225.000	-.4025	-.4137	-.4083
270.000	-.3994	-.4100	-.4117
315.000	-.4085	-.4202	-.4119

ALPHAO(7) = 1.940 BETAO (11) = 10.140

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4175	-.4235	-.4287
45.000	-.4144	-.4199	-.4451
90.000	-.4089	-.4206	-.4378
135.000	-.4121	-.4284	-.4320
180.000	-.4238	-.4214	-.4241
225.000	-.4131	-.4190	-.4184
270.000	-.4121	-.4151	-.4095
315.000	-.4162	-.4203	-.4142

AR 1-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X32)

ALPHA0(8) = 3.970 BETA0 (1) = -9.950

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4946	-.4999	-.5079
45.000	-.4894	-.5085	-.5155
90.000	-.4931	-.5025	-.5111
135.000	-.4946	-.5027	-.5043
180.000	-.5012	-.5022	-.4919
225.000	-.4912	-.4967	-.4945
270.000	-.4920	-.4978	-.4932
315.000	-.4980	-.5025	-.4992

ALPHA0(8) = 3.990 BETA0 (2) = -8.000

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.5068	-.5136	-.5201
45.000	-.5029	-.5039	-.5230
90.000	-.5023	-.5099	-.5201
135.000	-.5034	-.5089	-.5159
180.000	-.5037	-.5078	-.5051
225.000	-.5018	-.5073	-.5009
270.000	-.5060	-.5130	-.4856
315.000	-.5102	-.5149	-.5111

ALPHA0(8) = 3.970 BETA0 (3) = -6.020

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4960	-.5039	-.5068
45.000	-.4929	-.5023	-.5110
90.000	-.4947	-.4955	-.5097
135.000	-.4958	-.4968	-.4989
180.000	-.4945	-.4976	-.4985
225.000	-.4924	-.4953	-.4967
270.000	-.4945	-.5013	-.4540
315.000	-.4989	-.5023	-.5045

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X32)

ALPHAO(8) = 3.930 BETAO (4) = -3.990

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4793	-.4879	-.4928
45.000	-.4829	-.4897	-.4986
90.000	-.4759	-.4819	-.4908
135.000	-.4738	-.4832	-.4913
180.000	-.4780	-.4858	-.4881
225.000	-.4824	-.4845	-.4883
270.000	-.4803	-.4897	-.4344
315.000	-.4787	-.4835	-.4837

ALPHAO(8) = 3.930 BETAO (5) = -2.000

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4692	-.4739	-.4833
45.000	-.4658	-.4770	-.4841
90.000	-.4666	-.4689	-.4807
135.000	-.4710	-.4736	-.4854
180.000	-.4687	-.4765	-.4805
225.000	-.4695	-.4739	-.4740
270.000	-.4700	-.4765	-.4378
315.000	-.4663	-.4768	-.4755

ALPHAO(8) = 3.940 BETAO (6) = .040

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4567	-.4643	-.4721
45.000	-.4552	-.4640	-.4742
90.000	-.4586	-.4604	-.4667
135.000	-.4578	-.4643	-.4729
180.000	-.4619	-.4656	-.4644
225.000	-.4601	-.4638	-.4667
270.000	-.4575	-.4641	-.4177
315.000	-.4552	-.4648	-.4615

ARC11-715 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X32)

ALPHA0(8) = 4.030 BETA0 (7) = 2.050

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4622	-.4711	-.4771
45.000	-.4604	-.4674	-.4839
90.000	-.4599	-.4683	-.4698
135.000	-.4573	-.4714	-.4813
180.000	-.4690	-.4678	-.4692
225.000	-.4643	-.4722	-.4729
270.000	-.4648	-.4732	-.4155
315.000	-.4656	-.4654	-.4672

ALPHA0(8) = 4.020 BETA0 (8) = 4.070

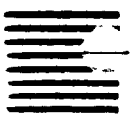
SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4424	-.4489	-.4581
45.000	-.4400	-.4534	-.4646
90.000	-.4346	-.4469	-.4565
135.000	-.4479	-.4552	-.4605
180.000	-.4442	-.4513	-.4466
225.000	-.4419	-.4597	-.4455
270.000	-.4440	-.4599	-.3925
315.000	-.4458	-.4466	-.4489

ALPHA0(8) = 4.010 BETA0 (9) = 6.080

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4309	-.4341	-.4440
45.000	-.4252	-.4349	-.4558
90.000	-.4249	-.4289	-.4484
135.000	-.4257	-.4310	-.4511
180.000	-.4278	-.4333	-.4317
225.000	-.4244	-.4317	-.4278
270.000	-.4228	-.4276	-.4177
315.000	-.4286	-.4263	-.4336



ARC11-716 IA14 C1+T12+S12N25+AT10 SRM NOZZLE (RB1X32)

ALPHAO(8) = 4.060 BETAO (10) = 8.110

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4230	-.4298	-.4397
45.000	-.4141	-.4293	-.4501
90.000	-.4073	-.4222	-.4423
135.000	-.4162	-.4225	-.4407
180.000	-.4225	-.4201	-.4273
225.000	-.4207	-.4136	-.4182
270.000	-.4167	-.4131	-.4135
315.000	-.4175	-.4209	-.4192

ALPHAO(8) = 4.050 BETAO (11) = 10.160

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4180	-.4242	-.4331
45.000	-.4099	-.4235	-.4386
90.000	-.4073	-.4222	-.4414
135.000	-.4155	-.4222	-.4409
180.000	-.4224	-.4315	-.4290
225.000	-.4164	-.4248	-.4233
270.000	-.4073	-.4102	-.4093
315.000	-.4125	-.4164	-.4140

ALPHAO(9) = 5.980 BETAO (1) = -9.980

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4832	-.4892	-.4988
45.000	-.4826	-.4967	-.5032
90.000	-.4793	-.4933	-.5019
135.000	-.4858	-.4928	-.5022
180.000	-.4881	-.4902	-.4906
225.000	-.4884	-.4905	-.4862
270.000	-.4829	-.4897	-.4810
315.000	-.4892	-.4933	-.4906

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X32)

ALPHA0(9) = 5.960 BETA0 (2) = -7.980

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4904	-.4946	-.5019
45.000	-.4891	-.4967	-.5092
90.000	-.4842	-.4990	-.5092
135.000	-.4888	-.4933	-.5034
180.000	-.4891	-.4886	-.4875
225.000	-.4849	-.4862	-.4867
270.000	-.4881	-.4943	-.4820
315.000	-.4915	-.4985	-.4935

ALPHA0(9) = 5.940 BETA0 (3) = -5.960

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4923	-.4970	-.5050
45.000	-.4894	-.5011	-.5134
90.000	-.4881	-.4954	-.5082
135.000	-.4910	-.4920	-.4925
180.000	-.4917	-.4910	-.4888
225.000	-.4923	-.4949	-.4932
270.000	-.4902	-.4938	-.4697
315.000	-.4972	-.4965	-.4976

ALPHA0(9) = 5.980 BETA0 (4) = -3.990

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4838	-.4905	-.4992
45.000	-.4817	-.4890	-.5067
90.000	-.4812	-.4901	-.5036
135.000	-.4835	-.4830	-.4875
180.000	-.4856	-.4880	-.4899
225.000	-.4879	-.4901	-.4899
270.000	-.4788	-.4914	-.4522
315.000	-.4951	-.4906	-.4929

ARC11-716 IA14 01+T12+S12N25+4T10 SRM NOZZLE (RB1X32)

ALPHAO(9) = 5.970 BETAO (5) = -1.970

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4705	-.4796	-.4895
45.000	-.4721	-.4812	-.4916
90.000	-.4710	-.4731	-.4846
135.000	-.4731	-.4768	-.4799
180.000	-.4742	-.4804	-.4844
225.000	-.4723	-.4786	-.4813
270.000	-.4708	-.4807	-.4353
315.000	-.4760	-.4809	-.4833

ALPHAO(9) = 5.980 BETAO (6) = .030

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4725	-.4806	-.4915
45.000	-.4722	-.4795	-.4990
90.000	-.4707	-.4818	-.4860
135.000	-.4764	-.4779	-.4816
180.000	-.4733	-.4831	-.4876
225.000	-.4767	-.4803	-.4840
270.000	-.4717	-.4850	-.4183
315.000	-.4707	-.4779	-.4824

ALPHAO(9) = 5.970 BETAO (7) = 2.030

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4717	-.4767	-.4871
45.000	-.4694	-.4769	-.4759
90.000	-.4629	-.4751	-.4832
135.000	-.4639	-.4744	-.4858
180.000	-.4710	-.4754	-.4759
225.000	-.4736	-.4777	-.4790
270.000	-.4686	-.4777	-.4170
315.000	-.4710	-.4762	-.4720

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X32)

ALPHAO(9) = 5.950 BETAO (8) = 4.080

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4548	-.4623	-.4690
45.000	-.4522	-.4628	-.4753
90.000	-.4472	-.4571	-.4636
135.000	-.4511	-.4579	-.4641
180.000	-.4532	-.4568	-.4538
225.000	-.4542	-.4625	-.4590
270.000	-.4522	-.4654	-.4154
315.000	-.4553	-.4586	-.4584

ALPHAO(9) = 5.940 BETAO (9) = 6.100

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4524	-.4582	-.4670
45.000	-.4517	-.4610	-.4777
90.000	-.4439	-.4540	-.4626
135.000	-.4485	-.4509	-.4623
180.000	-.4478	-.4587	-.4517
225.000	-.4488	-.4524	-.4478
270.000	-.4496	-.4553	-.4431
315.000	-.4511	-.4576	-.4537

ALPHAO(9) = 5.920 BETAO (10) = 8.130

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4375	-.4493	-.4633
45.000	-.4375	-.4516	-.4750
90.000	-.4284	-.4422	-.4531
135.000	-.4315	-.4380	-.4417
180.000	-.4313	-.4349	-.4322
225.000	-.4315	-.4307	-.4322
270.000	-.4357	-.4401	-.4406
315.000	-.4443	-.4476	-.4460

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X32)

ALPHAO(9) = 5.980 BETAO (11) = 10.150

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4464	-.4524	-.4661
45.000	-.4456	-.4540	-.4726
90.000	-.4344	-.4434	-.4533
135.000	-.4334	-.4429	-.4502
180.000	-.4383	-.4429	-.4473
225.000	-.4355	-.4390	-.4403
270.000	-.4396	-.4460	-.4395
315.000	-.4480	-.4468	-.4442

ALPHAO(10) = 8.080 BETAO (1) = -9.950

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4748	-.4912	-.4978
45.000	-.4748	-.4965	-.4988
90.000	-.4766	-.4923	-.5048
135.000	-.4876	-.4949	-.4988
180.000	-.4886	-.4980	-.4838
225.000	-.4842	-.4899	-.4737
270.000	-.4839	-.4881	-.4774
315.000	-.4834	-.4917	-.4846

ALPHAO(10) = 8.110 BETAO (2) = -7.950

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4865	-.4979	-.5046
45.000	-.4860	-.4982	-.5054
90.000	-.4854	-.5020	-.5126
135.000	-.4906	-.4986	-.5095
180.000	-.4922	-.4950	-.4920
225.000	-.4919	-.4942	-.4859
270.000	-.4896	-.4958	-.4833
315.000	-.4880	-.5002	-.4926

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X32)

ALPHAO(10) = 8.130 BETAO (3) = -5.940

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4898	-.5010	-.5143
45.000	-.4929	-.5023	-.5156
90.000	-.4908	-.5086	-.5224
135.000	-.4992	-.5023	-.5117
180.000	-.5005	-.4971	-.4948
225.000	-.4953	-.4989	-.4894
270.000	-.4971	-.4997	-.4863
315.000	-.4984	-.5070	-.4969

ALPHAO(10) = 7.980 BETAO (4) = -3.970

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4898	-.5054	-.5164
45.000	-.4945	-.5039	-.5213
90.000	-.4997	-.5015	-.5205
135.000	-.5002	-.4976	-.5067
180.000	-.4948	-.4992	-.4951
225.000	-.4935	-.5010	-.4951
270.000	-.4911	-.5049	-.4809
315.000	-.4982	-.5044	-.5034

ALPHAO(10) = 8.010 BETAO (5) = -1.970

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4962	-.4985	-.5118
45.000	-.4954	-.5009	-.5196
90.000	-.4850	-.4954	-.5102
135.000	-.4845	-.4915	-.4923
180.000	-.4905	-.4957	-.4950
225.000	-.4873	-.4889	-.4932
270.000	-.4907	-.4988	-.4730
315.000	-.4949	-.4993	-.4979

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X32)

ALPHAO(10) = 7.930 BETAO (5) = .060

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4858	-.4972	-.5065
45.000	-.4881	-.5008	-.5138
90.000	-.4858	-.4977	-.5107
135.000	-.4829	-.4901	-.4992
180.000	-.4910	-.4938	-.4866
225.000	-.4863	-.4914	-.4902
270.000	-.4879	-.5016	-.4553
315.000	-.4938	-.4956	-.4904

ALPHAO(10) = 7.970 BETAO (7) = 2.050

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4852	-.4924	-.5012
45.000	-.4852	-.4989	-.5125
90.000	-.4847	-.4890	-.5014
135.000	-.4839	-.4857	-.4909
180.000	-.4847	-.4883	-.4853
225.000	-.4852	-.4862	-.4887
270.000	-.4835	-.4919	-.4625
315.000	-.4888	-.4909	-.4894

ALPHAO(10) = 7.950 BETAO (8) = 4.080

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4705	-.4782	-.4854
45.000	-.4674	-.4813	-.4965
90.000	-.4635	-.475.	-.4919
135.000	-.4681	-.4692	-.4759
180.000	-.4689	-.4717	-.4680
225.000	-.4638	-.4741	-.4644
270.000	-.4674	-.4790	-.4369
315.000	-.4692	-.4738	-.4719

ARC11-716 IA14 C1+T12+S12N25+AT1D SRM NOZZLE (RB1X32)

ALPHAO(10) = 7.920 BETAO (9) = 6.110

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4592	-.4773	-.4861
45.000	-.4589	-.4729	-.4998
90.000	-.4608	-.4644	-.4835
135.000	-.4587	-.4619	-.4691
180.000	-.4584	-.4603	-.4548
225.000	-.4564	-.4513	-.4505
270.000	-.4620	-.4709	-.4590
315.000	-.4739	-.4763	-.4652

ALPHAO(10) = 7.910 BETAO (10) = 8.160

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4531	-.4603	-.4698
45.000	-.4438	-.4606	-.4816
90.000	-.4420	-.4541	-.4736
135.000	-.4487	-.4494	-.4620
180.000	-.4508	-.4458	-.4480
225.000	-.4438	-.4404	-.4390
270.000	-.4482	-.4546	-.4472
315.000	-.4554	-.4551	-.4534

ALPHAO(10) = 8.060 BETAO (11) = 10.180

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4556	-.4654	-.4789
45.000	-.4461	-.4687	-.4900
90.000	-.4458	-.4570	-.4799
135.000	-.4504	-.4508	-.4578
180.000	-.4520	-.4529	-.4547
225.000	-.4466	-.4475	-.4473
270.000	-.4512	-.4575	-.4493
315.000	-.4595	-.4622	-.4596

ARC11-716 IA14 O1+T12+S12N25+AT10 SRM NOZZLE (RB1X32)

ALPHAO(11) = 10.040 BETAO (1) = -9.930

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4796	-.4809	-.4871
45.000	-.4812	-.4948	-.4945
90.000	-.4791	-.4886	-.4989
135.000	-.4817	-.4963	-.5058
180.000	-.4915	-.4976	-.4921
225.000	-.4861	-.4925	-.4896
270.000	-.4789	-.4835	-.4814
315.000	-.4735	-.4759	-.4760

ALPHAO(11) = 9.930 BETAO (2) = -7.950

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4916	-.5023	-.5001
45.000	-.4882	-.5003	-.5108
90.000	-.4877	-.5083	-.5157
135.000	-.4967	-.5067	-.5201
180.000	-.4975	-.5062	-.5033
225.000	-.4962	-.5006	-.4954
270.000	-.4903	-.4960	-.4898
315.000	-.4877	-.4995	-.4870

ALPHAO(11) = 9.960 BETAO (3) = -5.920

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.5013	-.5082	-.5123
45.000	-.5003	-.5105	-.5239
90.000	-.4998	-.5134	-.5329
135.000	-.5008	-.5129	-.5244
180.000	-.5026	-.5067	-.5065
225.000	-.5034	-.5039	-.5054
270.000	-.4964	-.5016	-.4980
315.000	-.5026	-.5034	-.5049

ARC11-716 IA14 OL+T12+S12N25+AT1D SRM NOZZLC (RB1x32)

ALPHAO(11) = 9.980 BETAO (4) = -3.970

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.5139	-.5186	-.5273
45.000	-.5134	-.5224	-.5368
90.000	-.5134	-.5265	-.5445
135.000	-.5134	-.5150	-.5281
180.000	-.5134	-.5152	-.5132
225.000	-.5134	-.5132	-.5119
270.000	-.5090	-.5108	-.5075
315.000	-.5154	-.5178	-.5126

ALPHAO(11) = 9.980 BETAO (5) = -1.970

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4967	-.4996	-.5026
45.000	-.4974	-.5031	-.5074
90.000	-.4973	-.5077	-.5145
135.000	-.4974	-.5031	-.5087
180.000	-.4969	-.4992	-.4992
225.000	-.4967	-.4994	-.4987
270.000	-.4973	-.5006	-.4995
315.000	-.4967	-.4977	-.4939

ALPHAO(11) = 9.980 BETAO (6) = .030

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4837	-.4924	-.4990
45.000	-.4829	-.4950	-.5126
90.000	-.4837	-.4972	-.5121
135.000	-.4834	-.4895	-.4967
180.000	-.4803	-.4865	-.4820
225.000	-.4827	-.4877	-.4820
270.000	-.4829	-.4839	-.4841
315.000	-.4965	-.4900	-.4884

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X32)

ALPHAD(11) = 9.950 BETAD (7) = 2.060

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4829	-.4944	-.4914
45.000	-.4811	-.4962	-.5037
90.000	-.4793	-.4960	-.5109
135.000	-.4798	-.4876	-.4937
180.000	-.4831	-.4886	-.4847
225.000	-.4829	-.4832	-.4788
270.000	-.4839	-.4860	-.4811
315.000	-.4860	-.4883	-.4816

ALPHAD(11) = 9.980 BETAD (8) = 4.080

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4698	-.4711	-.4867
45.000	-.4672	-.4793	-.5016
90.000	-.4682	-.4787	-.5052
135.000	-.4652	-.4715	-.4[illegible]
180.000	-.4675	-.4731	-.4662
225.000	-.4610	-.4720	-.4634
270.000	-.4657	-.4[illegible]	-.4[illegible]
315.000	-.4[illegible]	-.4[illegible]	-.46[illegible]

ALPHAD(11) = 10.040 BETAD (9) = 6.140

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4695	-.4826	-.4920
45.000	-.4638	-.4811	-.5064
90.000	-.4582	-.4799	-.4987
135.000	-.4654	-.4781	-.4739
180.000	-.4661	-.4747	-.4683
225.000	-.4605	-.4663	-.4596
270.000	-.4656	-.4688	-.4589
315.000	-.4715	-.4763	-.4624

ARC11-716 IA14 O1+T12+S12N25+AT10 SRM NOZZLE (RB1X32)

ALPHAO(11) = 10.030 BETAO (10) = 8.160

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4570	-.4665	-.4699
45.000	-.4508	-.4722	-.4877
90.000	-.4529	-.4589	-.4905
135.000	-.4622	-.4568	-.4607
180.000	-.4596	-.4573	-.4563
225.000	-.4568	-.4555	-.4486
270.000	-.4552	-.4607	-.4537
315.000	-.4622	-.4586	-.4568

ALPHAO(11) = 10.030 BETAO (11) = 10.230

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4469	-.4584	-.4686
45.000	-.4385	-.4609	-.4786
90.000	-.4479	-.4602	-.4829
135.000	-.4604	-.4526	-.4618
180.000	-.4604	-.4536	-.4521
225.000	-.4472	-.4505	-.4478
270.000	-.4449	-.4541	-.4478
315.000	-.4520	-.4506	-.4496

ARC11-716 IA14 O1+T12+S12N25+AT10 SRM NOZZLE (RB1X33) (17 APR 74)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5800 INCHES
LREF = 38.7090 INCHES YMRP = .0000 INCHES
BREF = 38.7090 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

MACH = 1.250 ELEVON = .000
RUDDER = .000 SPDBRK = .000

ALPHAO(1) = -10.340 BETAO (1) = -9.910

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4803	-.4846	-.4836
45.000	-.4724	-.4793	-.4881
90.000	-.4703	-.4754	-.4868
135.000	-.4695	-.4731	-.4836
180.000	-.4677	-.4770	-.4800
225.000	-.4738	-.4789	-.4753
270.000	-.4732	-.4736	-.4648
315.000	-.4790	-.4899	-.4553

ALPHAO(1) = -10.260 BETAO (2) = -7.920

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4647	-.4711	-.4703
45.000	-.4584	-.4642	-.4758
90.000	-.4555	-.4613	-.4766
135.000	-.4550	-.4603	-.4758
180.000	-.4579	-.4640	-.4639
225.000	-.4584	-.4653	-.4579
270.000	-.4574	-.4629	-.4476
315.000	-.4605	-.4734	-.4324

ALPHAO(1) = -10.250 BETAO (3) = -5.920

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4521	-.4547	-.4584
45.000	-.4482	-.4547	-.4642
90.000	-.4458	-.4568	-.4679
135.000	-.4518	-.4579	-.4668
180.000	-.4474	-.4558	-.4555
225.000	-.4495	-.4492	-.4477

ARC11-716 IA14 O1+T12+S12N25+AT10 SRM NOZZLE (RB1X33)

ALPHAO(1) = -10.250 BETAO (3) = -5.920

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
270.000	-.4490	-.4568	-.4254
315.000	-.4532	-.4571	-.4466

ALPHAO(1) = -10.240 BETAO (4) = -3.960

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4525	-.4517	-.4559
45.000	-.4483	-.4567	-.4680
90.000	-.4499	-.4562	-.4688
135.000	-.4462	-.4543	-.4585
180.000	-.4472	-.4517	-.4494
225.000	-.4464	-.4543	-.4538
270.000	-.4489	-.4625	-.3765
315.000	-.4509	-.4743	-.4677

ALPHAO(1) = -10.250 BETAO (5) = -1.970

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4511	-.4525	-.4556
45.000	-.4530	-.4533	-.4678
90.000	-.4456	-.4551	-.4707
135.000	-.4453	-.4514	-.4617
180.000	-.4496	-.4517	-.4467
225.000	-.4475	-.4551	-.4591
270.000	-.4475	-.4585	-.3292
315.000	-.4522	-.4635	-.4659

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X33)

ALPHA0(1) = -10.16 BETA0 (6) = .020

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4159	-.4196	-.4242
45.000	-.4172	-.4275	-.4366
90.000	-.4154	-.4271	-.4472
135.000	-.4170	-.4227	-.4335
180.000	-.4215	-.4195	-.4174
225.000	-.4162	-.4321	-.4260
270.000	-.4172	-.4290	-.2942
315.000	-.4162	-.4232	-.4274

ALPHA0(1) = -10.160 BETA0 (7) = 2.040

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3924	-.3998	-.4040
45.000	-.3943	-.3982	-.4000
90.000	-.3953	-.4027	-.4216
135.000	-.3974	-.4000	-.4061
180.000	-.3945	-.4019	-.3975
225.000	-.3929	-.4140	-.3833
270.000	-.3935	-.4058	-.3161
315.000	-.3971	-.4016	-.3998

ALPHA0(1) = -10.220 BETA0 (8) = 4.080

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3651	-.3753	-.3905
45.000	-.3614	-.3688	-.3836
90.000	-.3595	-.3618	-.3697
135.000	-.3574	-.3618	-.3678
180.000	-.3580	-.3623	-.3569
225.000	-.3611	-.3731	-.3563
270.000	-.3651	-.3839	-.3498
315.000	-.3751	-.3778	-.3712

ARC11-716 IA14 O1+T12+S12N25+AT10 SRM NOZZLE (RB1x33)

ALPHAO(1) = -10.230 BETAO (9) = 6.080

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3497	-.3592	-.3748
45.000	-.3447	-.3595	-.3427
90.000	-.3531	-.3538	-.3630
135.000	-.3526	-.3499	-.3517
180.000	-.3474	-.3478	-.3471
225.000	-.3437	-.3517	-.3248
270.000	-.3508	-.3619	-.3529
315.000	-.3595	-.3606	-.3547

ALPHAO(1) = -10.230 BETAO (10) = 8.120

SECTION (1)SRM NOZZLE DEPENDENT /ARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3453	-.3552	-.3665
45.000	-.3408	-.3584	-.3749
90.000	-.3555	-.3610	-.3694
135.000	-.3639	-.3592	-.3607
180.000	-.3560	-.3579	-.3575
225.000	-.3518	-.3613	-.3248
270.000	-.3479	-.3537	-.3575
315.000	-.3505	-.3513	-.3476

ALPHAO(1) = -10.240 BETAO (11) = 10.110

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3296	-.3417	-.3588
45.000	-.3351	-.3496	-.3638
90.000	-.3470	-.3554	-.3638
135.000	-.3606	-.3533	-.3548
180.000	-.3543	-.3493	-.3528
225.000	-.3457	-.3483	-.3118
270.000	-.3401	-.3422	-.3411
315.000	-.3351	-.3370	-.3316

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X33)

ALPHA0(2) = -8.220 BETA0 (1) = -9.940

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4236	-.4341	-.4375
45.000	-.4231	-.4294	-.4404
90.000	-.4233	-.4252	-.4409
135.000	-.4223	-.4244	-.4336
180.000	-.4231	-.4244	-.4237
225.000	-.4223	-.4247	-.4242
270.000	-.4223	-.4310	-.3314
315.000	-.4226	-.4480	-.4150

ALPHA0(2) = -8.240 BETA0 (2) = -7.960

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4529	-.4626	-.4621
45.000	-.4518	-.4576	-.4697
90.000	-.4482	-.4566	-.4658
135.000	-.4508	-.4558	-.4663
180.000	-.4518	-.4542	-.4555
225.000	-.4521	-.4534	-.4532
270.000	-.4495	-.4566	-.4474
315.000	-.4563	-.4607	-.4539

ALPHA0(2) = -8.240 BETA0 (3) = -5.960

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4547	-.4624	-.4645
45.000	-.4550	-.4637	-.4700
90.000	-.4539	-.4605	-.4695
135.000	-.4553	-.4579	-.4705
180.000	-.4547	-.4566	-.4578
225.000	-.4547	-.4571	-.4531
270.000	-.4545	-.4653	-.4337
315.000	-.4575	-.4691	-.4549

ARC11-716 IA14 O1+T12+S12N25+AT10 SRM NOZZLE (RB1X33)

ALPHAO(2) = -8.250 BETAO (4) = -3.980

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4458	-.4563	-.4608
45.000	-.4542	-.4587	-.4671
90.000	-.4534	-.4576	-.4713
135.000	-.4526	-.4574	-.4650
180.000	-.4529	-.4555	-.4517
225.000	-.4545	-.4584	-.4546
270.000	-.4539	-.4660	-.3899
315.000	-.4553	-.4700	-.4739

ALPHAO(2) = -8.250 BETAO (5) = -1.990

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4408	-.4434	-.4500
45.000	-.4405	-.4452	-.4610
90.000	-.4395	-.4463	-.4636
135.000	-.4405	-.4442	-.4544
180.000	-.4411	-.4405	-.4429
225.000	-.4410	-.4439	-.4474
270.000	-.4426	-.4513	-.3419
315.000	-.4442	-.4487	-.4571

ALPHAO(2) = -8.250 BETAO (6) = .010

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4098	-.4152	-.4203
45.000	-.4130	-.4212	-.4334
90.000	-.4114	-.4224	-.4382
135.000	-.4146	-.4184	-.4271
180.000	-.4140	-.4192	-.4157
225.000	-.4122	-.4207	-.4215
270.000	-.4140	-.4257	-.3076
315.000	-.4151	-.4182	-.4197

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (R01X33)

ALPHA0(2) = -8.230 BETA0 (7) = 2.020

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3874	-.3956	-.4014
45.000	-.3929	-.3964	-.4022
90.000	-.3919	-.4022	-.4201
135.000	-.3935	-.3985	-.4040
180.000	-.3940	-.3961	-.3974
225.000	-.3911	-.4103	-.3833
270.000	-.3913	-.4022	-.3909
315.000	-.3913	-.4019	-.3993

ALPHA0(2) = -8.230 BETA0 (8) = 4.040

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3366	-.3485	-.3578
45.000	-.3369	-.3456	-.3557
90.000	-.3366	-.3399	-.3449
135.000	-.3377	-.3378	-.3396
180.000	-.3327	-.3412	-.3389
225.000	-.3332	-.3381	-.2695
270.000	-.3387	-.3536	-.3334
315.000	-.3442	-.3439	-.3407

ALPHA0(2) = -8.220 BETA0 (9) = 6.050

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3209	-.3317	-.3485
45.000	-.3154	-.3328	-.3464
90.000	-.3304	-.3309	-.3354
135.000	-.3322	-.3249	-.3275
180.000	-.3220	-.3259	-.3273
225.000	-.3202	[illegible]	-.2836
270.000	-.3196	[illegible]	-.3226
315.000	-.3278	[illegible]	-.3213

ARC11-716 IA14 O1+T12+S12N25+AT10 SRM NOZZLE (RB1X33)

ALPHAO(2) = -8.220 BETAO (10) = 8.100

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3156	-.3240	-.3381
45.000	-.3190	-.3279	-.3397
90.000	-.3274	-.3324	-.3384
135.000	-.3379	-.3321	-.3305
180.000	-.3329	-.3297	-.3299
225.000	-.3226	-.3258	-.3017
270.000	-.3200	-.3200	-.3163
315.000	-.3171	-.3161	-.3119

ALPHAO(2) = -8.220 BETAO (11) = 10.130

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3236	-.3354	-.3478
45.000	-.3275	-.3428	-.3573
90.000	-.3373	-.3481	-.3541
135.000	-.3515	-.3470	-.3468
180.000	-.3444	-.3420	-.3418
225.000	-.3354	-.3407	-.3090
270.000	-.3339	-.3323	-.3334
315.000	-.3265	-.3286	-.3229

ALPHAO(3) = -6.280 BETAO (1) = -9.970

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4351	-.4403	-.4345
45.000	-.4259	-.4351	-.4498
90.000	-.4274	-.4298	-.4453
135.000	-.4314	-.4285	-.4356
180.000	-.4290	-.4303	-.4288
225.000	-.4287	-.4298	-.4288
270.000	-.4298	-.4398	-.3310
315.000	-.4340	-.4582	-.4530

DATE 06 JAN 75 TABULATED PRESSURE DATA - IA14A - VOL. 9

ARC11-716 IA14 D1+T12+S12N25+AT10 SRM NOZZLE (RB1X33)

ALPHAO(3) = -6.280 BETAO (2) = -7.990

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4138	-.4215	-.4135
45.000	-.4127	-.4141	-.4273
90.000	-.4080	-.4111	-.4278
135.000	-.4064	-.4119	-.4209
180.000	-.4096	-.4104	-.4083
225.000	-.4080	-.4162	-.4139
270.000	-.4064	-.4090	-.2834
315.000	-.4122	-.4373	-.4260

ALPHAO(3) = -6.300 BETAO (3) = -6.000

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4017	-.4038	-.4038
45.000	-.4020	-.4030	-.4176
90.000	-.4025	-.4057	-.4208
135.000	-.4012	-.4049	-.4134
180.000	-.4012	-.4017	-.3968
225.000	-.4015	-.4192	-.4226
270.000	-.4012	-.3872	-.2329
315.000	-.4004	-.4334	-.4245

ALPHAO(3) = -6.260 BETAO (4) = -3.980

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4509	-.4493	-.4578
45.000	-.4490	-.4509	-.4609
90.000	-.4493	-.4501	-.4599
135.000	-.4498	-.4482	-.4578
180.000	-.4482	-.4459	-.4476
225.000	-.4493	-.4461	-.4536
270.000	-.4488	-.4604	-.3578
315.000	-.4482	-.4641	-.4676

ARC11-716 IA14 O1+T12+S12N25+AT10 SRM NOZZLE (RB1X33)

ALPHAO(3) = -6.180 BETAO (3) = .030

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4088	-.4101	-.4154
45.000	-.4056	-.4101	-.4236
90.000	-.4040	-.4096	-.4283
135.000	-.4096	-.4114	-.4188
180.000	-.4075	-.4090	-.4066
225.000	-.4088	-.4085	-.4116
270.000	-.4080	-.4212	-.3173
315.000	-.4082	-.4148	-.4163

ALPHAO(3) = -6.320 BETAO (6) = 2.000

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3956	-.4017	-.4051
45.000	-.3996	-.4038	-.4085
90.000	-.3969	-.4033	-.4215
135.000	-.3996	-.4035	-.4141
180.000	-.4017	-.4035	-.3984
225.000	-.3964	-.4146	-.4061
270.000	-.3975	-.4115	-.3108
315.000	-.3990	-.4051	-.4069

ALPHAO(3) = -6.330 BETAO (7) = 4.070

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3724	-.3798	-.3828
45.000	-.3724	-.3732	-.3796
90.000	-.3689	-.3727	-.3825
135.000	-.3681	-.3730	-.3778
180.000	-.3681	-.3714	-.3702
225.000	-.3681	-.3754	-.3691
270.000	-.3729	-.3817	-.3699
315.000	-.3737	-.3754	-.3752

ARC11-716 IA14 01+T12+S12N25+AT1D SRM NOZZLE (RB1X33)

ALPHA(0 3) = -6.360 BETA(8) = 6.050

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3247	-.3351	-.3527
45.000	-.3297	-.3372	-.3527
90.000	-.3316	-.3335	-.3410
135.000	-.3348	-.3304	-.3341
180.000	-.3268	-.3320	-.3250
225.000	-.3234	-.3266	-.3118
270.000	-.3250	-.3259	-.3216
315.000	-.3329	-.3272	-.3245

ALPHA(3) = -6.270 BETA (9) = 8.100

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3138	-.3273	-.3368
45.000	-.3158	-.3294	-.3416
90.000	-.3246	-.3344	-.3393
135.000	-.3395	-.3310	-.3289
180.000	-.3371	-.3334	-.3275
225.000	-.3249	-.3267	-.3038
270.000	-.3204	-.3175	-.3151
315.000	-.3193	-.3183	-.7150

ALPHA(3) = -6.260 BETA (10) = 10.090

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3199	-.3265	-.3408
45.000	-.3234	-.3359	-.3554
90.000	-.3275	-.3416	-.3462
135.000	-.3451	-.3392	-.3398
180.000	-.3430	-.3359	-.3350
225.000	-.3347	-.3400	-.3040
270.000	-.3313	-.3300	-.3287
315.000	-.3234	-.3265	-.3196

ARC11-716 IA14 O1+T12+S12N25+AT1D SRM NOZZLE (RB1X33)

ALPHAO(4) = -4.200 BETAO (1) = -9.980

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4329	-.4415	-.4439
45.000	-.4273	-.4391	-.4471
90.000	-.4257	-.4332	-.4426
135.000	-.4243	-.4297	-.4378
180.000	-.4243	-.4267	-.4264
225.000	-.4294	-.4310	-.4258
270.000	-.4351	-.4477	-.3398
315.000	-.4426	-.4560	-.4597

ALPHAO(4) = -4.230 BETAO (2) = -7.990

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4146	-.4227	-.4168
45.000	-.4125	-.4170	-.4320
90.000	-.4119	-.4133	-.4237
135.000	-.4119	-.4098	-.4178
180.000	-.4119	-.4114	-.4103
225.000	-.4117	-.4093	-.4189
270.000	-.4114	-.4176	-.2742
315.000	-.4141	-.4405	-.4405

ALPHAO(4) = -4.180 BETAO (3) = -5.970

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3843	-.4019	-.3944
45.000	-.3840	-.3968	-.4110
90.000	-.3869	-.3963	-.4107
135.000	-.3888	-.3909	-.3998
180.000	-.3917	-.3923	-.3947
225.000	-.3891	-.3982	-.4120
270.000	-.3931	-.3961	-.2436
315.000	-.3934	-.4217	-.4219

ARC11-716 TA14 3A+T12+S12N25+AT10 SRM NOZZLE (RB1X33)

ALPHA(4) = -4.190 BETA(4) = -3.950

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4308	-.4429	-.4515
45.000	-.4379	-.4424	-.4515
90.000	-.4336	-.4405	-.4512
135.000	-.4335	-.4384	-.4464
180.000	-.4336	-.4381	-.4362
225.000	-.4365	-.4384	-.4365
270.000	-.4395	-.4904	-.3831
315.000	-.4459	-.4550	-.4547

ALPHA(4) = -4.190 BETA(5) = -2.020

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4263	-.4343	-.4399
45.000	-.4263	-.4327	-.4426
90.000	-.4289	-.4295	-.4383
135.000	-.4271	-.4290	-.4359
180.000	-.4268	-.4303	-.4264
225.000	-.4314	-.4287	-.4269
270.000	-.4327	-.4389	-.3716
315.000	-.4335	-.4389	-.4490

ALPHA (4) = -4.080 BETA (6) = -.010

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4013	-.4105	-.4174
45.000	-.4013	-.4142	-.4255
90.000	-.4032	-.4102	-.4233
135.000	-.4135	-.4091	-.4155
180.000	-.4029	-.4064	-.4035
225.000	-.4051	-.4072	-.4094
270.000	-.4051	-.4102	-.3248
315.000	-.4080	-.4134	-.4129

ARC11-716 IA14 O1+T12+S12N25+AT10 SRM NOZZLE (RB1X33)

ALPHAO(4) = -4.210 BETAO (7) = 2.110

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4021	-.4048	-.4096
45.000	-.4021	-.4075	-.4207
90.000	-.4024	-.4107	-.4231
135.000	-.4018	-.4049	-.4153
180.000	-.4008	-.4064	-.4046
225.000	-.4040	-.4169	-.4113
270.000	-.4021	-.4169	-.3295
315.000	-.4067	-.4086	-.4070

ALPHAO(4) = -4.200 BETAO (8) = 4.090

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3738	-.3953	-.3936
45.000	-.3775	-.3824	-.3896
90.000	-.3762	-.3821	-.3907
135.000	-.3775	-.3794	-.3877
180.000	-.3799	-.3775	-.3724
225.000	-.3789	-.3848	-.3762
270.000	-.3799	-.3864	-.3756
315.000	-.3829	-.3893	-.3847

ALPHAO(4) = -4.210 BETAO (9) = 6.060

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3481	-.3680	-.3748
45.000	-.3543	-.3664	-.3820
90.000	-.3546	-.3611	-.3777
135.000	-.3572	-.3563	-.3622
180.000	-.3570	-.3563	-.3534
225.000	-.3551	-.3550	-.3526
270.000	-.3559	-.3603	-.3590
315.000	-.3618	-.3614	-.3619

ARC11-716 IA14 D1+T12+S12N25+AT10 SRM NOZZLE (RB1x33)

ALPHAO(4) = -4.200 BETAO (10) = 8.090

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3164	-.3212	-.3338
45.000	-.3166	-.3282	-.3461
90.000	-.3233	-.3338	-.3421
135.000	-.3335	-.3290	-.3316
180.000	-.3357	-.3300	-.3279
225.000	-.3247	-.3322	-.3129
270.000	-.3233	-.3229	-.3217
315.000	-.3199	-.3199	-.3121

ALPHAO(4) = -4.160 BETAO (11) = 10.090

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3216	-.3256	-.3315
45.000	-.3224	-.3307	-.3483
90.000	-.3224	-.3352	-.3505
135.000	-.3344	-.3363	-.3387
180.000	-.3398	-.3328	-.3319
225.000	-.3335	-.3430	-.3098
270.000	-.3297	-.3278	-.3343
315.000	-.3214	-.3238	-.3204

ALPHAO(5) = -4.870 BETAO (1) = -10.040

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4243	-.4326	-.4385
45.000	-.4256	-.4302	-.4428
90.000	-.4211	-.4272	-.4358
135.000	-.4251	-.4248	-.4315
180.000	-.4256	-.4283	-.4247
225.000	-.4286	-.4278	-.4242
270.000	-.4321	-.4422	-.4513
315.000	-.4388	-.4496	-.4519

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X33)

ALPHAO(5) = -2.870 BETAO (2) = -6.030

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4066	-.4165	-.4192
45.000	-.4021	-.4154	-.4282
90.000	-.4063	-.4114	-.4218
135.000	-.4069	-.4071	-.4168
180.000	-.4045	-.4071	-.4042
225.000	-.4079	-.4071	-.4119
270.000	-.4095	-.4176	-.2827
315.000	-.4186	-.4381	-.4409

ALPHAO(5) = -2.870 BETAO (3) = -5.960

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3996	-.4111	-.4076
45.000	-.3993	-.4089	-.4228
90.000	-.3980	-.4060	-.4175
135.000	-.3990	-.4052	-.4127
180.000	-.3998	-.4009	-.3990
225.000	-.3993	-.4089	-.4174
270.000	-.4033	-.4020	-.2401
315.000	-.4087	-.4332	-.4320

ALPHAO(5) = -2.860 BETAO (4) = -3.920

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4280	-.4377	-.4433
45.000	-.4302	-.4328	-.4446
90.000	-.4296	-.4307	-.4385
135.000	-.4286	-.4312	-.4361
180.000	-.4296	-.4302	-.4317
225.000	-.4302	-.4312	-.4309
270.000	-.4342	-.4443	-.3815
315.000	-.4417	-.4492	-.4490

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ARC11-716 IA14 01-T12+S12N25+AT10 SRM NOZZLE (RB1X33)

ALPHA(5) = -2.850 BETA (5) = -2.000

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4164	-.4239	-.4303
45.000	-.4194	-.4226	-.4330
90.000	-.4196	-.4207	-.4292
135.000	-.4199	-.4196	-.4276
180.000	-.4180	-.4191	-.4203
225.000	-.4196	-.4212	-.4205
270.000	-.4225	-.4327	-.3911
315.000	-.4252	-.4311	-.4349

ALPHA(5) = -2.850 BETA (6) = .020

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3984	-.4027	-.4083
45.000	-.3976	-.4043	-.4134
90.000	-.3979	-.4022	-.4118
135.000	-.3979	-.4000	-.4046
180.000	-.3974	-.4003	-.3986
225.000	-.3979	-.4022	-.4039
270.000	-.4019	-.4129	-.3154
315.000	-.3995	-.4070	-.4119

ALPHA(5) = -2.850 BETA (7) = 2.020

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4023	-.4069	-.4117
45.000	-.4023	-.4098	-.4222
90.000	-.4023	-.4074	-.4206
135.000	-.4053	-.4050	-.4135
180.000	-.4023	-.4045	-.4020
225.000	-.4023	-.4149	-.4100
270.000	-.4050	-.4179	-.3379
315.000	-.4047	-.4077	-.4081

ARC11-716 IA14 O1+T12+S12N25+AT10 SRM NOZZLE (RB1X33)

ALPHAO(5) = -2.770 BETAO (8) = 4.100

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3631	-.3663	-.3816
45.000	-.3629	-.3661	-.3853
90.000	-.3631	-.3646	-.3797
135.000	-.3591	-.3624	-.3668
180.000	-.3604	-.3614	-.3558
225.000	-.3615	-.3721	-.3296
270.000	-.3612	-.3783	-.3251
315.000	-.3610	-.3662	-.3616

ALPHAO(5) = -2.790 BETAO (9) = 6.120

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3391	-.3412	-.3478
45.000	-.3391	-.3466	-.3618
90.000	-.3391	-.3443	-.3610
135.000	-.3394	-.3422	-.3465
180.000	-.3386	-.3454	-.3373
225.000	-.3372	-.3395	-.3267
270.000	-.3343	-.3349	-.3306
315.000	-.3399	-.3390	-.3314

ALPHAO(5) = -2.790 BETAO (10) = 8.140

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3251	-.3256	-.3353
45.000	-.3243	-.3310	-.3452
90.000	-.3248	-.3355	-.3467
135.000	-.3263	-.3355	-.3361
180.000	-.3387	-.3355	-.3305
225.000	-.3320	-.3396	-.3193
270.000	-.3280	-.3269	-.3271
315.000	-.3227	-.3240	-.3169

ARC11-716 (A14 01+T12+S12N25+AT10 SRM NOZZLE (RB1x33)

ALPHA0(5) = -2.770 BETA0 (11 = 10.100

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3341	-.3378	-.3461
45.000	-.3335	-.3416	-.3569
90.000	-.3338	-.3402	-.3558
135.000	-.3354	-.3416	-.3448
180.000	-.3416	-.3408	-.3348
225.000	-.3359	-.3456	-.3196
270.000	-.3330	-.3365	-.3346
315.000	-.3327	-.3343	-.3266

ALPHA0(6) = -.760 BETA0 (1) = -10.520

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4435	-.4497	-.4588
45.000	-.4411	-.4454	-.4593
90.000	-.4413	-.4470	-.4545
135.000	-.4424	-.4448	-.4472
180.000	-.4448	-.4419	-.4379
225.000	-.4478	-.4472	-.4401
270.000	-.4472	-.4553	-.4248
315.000	-.4494	-.4529	-.4551

ALPHA0(6) = -.790 BETA0 (2 = -8.420

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4153	-.4269	-.4355
45.000	-.4148	-.4255	-.4401
90.000	-.4177	-.4218	-.4331
135.000	-.4196	-.4196	-.4274
180.000	-.4164	-.4174	-.4155
225.000	-.4244	-.4212	-.4192
270.000	-.4196	-.4336	-.3225
315.000	-.4320	-.4392	-.4407

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X33)

ALPHAO(6) = -.730 BETAO (3) = -6.290

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4228	-.4257	-.4346
45.000	-.4206	-.4292	-.4416
90.000	-.4233	-.4262	-.4421
135.000	-.4201	-.4238	-.4346
180.000	-.4204	-.4214	-.4212
225.000	-.4241	-.4281	-.4295
270.000	-.4266	-.4329	-.2790
315.000	-.4282	-.4504	-.4538

ALPHAO(6) = -.710 BETAO (4) = -4.140

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4095	-.4173	-.4130
45.000	-.4087	-.4098	-.4251
90.000	-.4033	-.4103	-.4211
135.000	-.4157	-.4076	-.4162
180.000	-.4012	-.4028	-.4033
225.000	-.4049	-.4197	-.4228
270.000	-.4047	-.4049	-.2304
315.000	-.4055	-.4380	-.4444

ALPHAO(6) = -.700 BETAO (5) = -2.080

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3813	-.3869	-.3978
45.000	-.3831	-.3880	-.4043
90.000	-.3821	-.3882	-.4037
135.000	-.3829	-.3893	-.3965
180.000	-.3853	-.3850	-.3967
225.000	-.3847	-.4142	-.4113
270.000	-.3858	-.3918	-.2164
315.000	-.3855	-.[illegible]	-.4201

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ARC11-716 TA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X33)

ALPHA0(6) = -.700 BETA0 (5) = .030

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3962	-.3981	-.4108
45.000	-.3989	-.4045	-.4149
90.000	-.3946	-.4017	-.4108
135.000	-.3962	-.4009	-.4074
180.000	-.3962	-.3977	-.3947
225.000	-.3965	-.4028	-.3979
270.000	-.3954	-.4130	-.3235
315.000	-.3975	-.4071	-.4085

ALPHA0(6) = -.700 BETA0 (7) = 2.160

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3995	-.3938	-.4095
45.000	-.3995	-.4033	-.4162
90.000	-.4017	-.4070	-.4210
135.000	-.4017	-.4068	-.4108
180.000	-.4011	-.4046	-.3971
225.000	-.4000	-.4017	-.4019
270.000	-.3995	-.4108	-.3693
315.000	-.3992	-.4035	-.4017

ALPHA0(6) = -.710 BETA0 (8) = 4.270

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3852	-.3863	-.3952
45.000	-.3844	-.3927	-.4041
90.000	-.3857	-.3896	-.3922
135.000	-.3833	-.3899	-.3974
180.000	-.3871	-.3874	-.3924
225.000	-.3863	-.3880	-.3813
270.000	-.3863	-.3987	-.3802
315.000	-.3850	-.3885	-.3821

ARC11-716 IA14 O1+T12+S12N25+AT10 SRM NOZZLE (RB1X33)

ALPHA0(6) = -.730 BETA0 (9) = 6.350

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3583	-.3594	-.3676
45.000	-.3583	-.3650	-.3791
90.000	-.3578	-.3684	-.3791
135.000	-.3578	-.3652	-.3714
180.000	-.3671	-.3658	-.3591
225.000	-.3594	-.3650	-.3565
270.000	-.3583	-.3599	-.3551
315.000	-.3591	-.3594	-.3549

ALPHA0(6) = -.730 BETA0 (10) = 8.130

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3526	-.3538	-.3655
45.000	-.3514	-.3617	-.3737
90.000	-.3557	-.3655	-.3784
135.000	-.3551	-.3623	-.3691
180.000	-.3665	-.3639	-.3517
225.000	-.3612	-.3623	-.3596
270.000	-.3564	-.3557	-.3554
315.000	-.3545	-.3558	-.3533

ALPHA0(6) = -.730 BETA0 (11) = 10.110

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3584	-.3547	-.3658
45.000	-.3501	-.3611	-.3823
90.000	-.3435	-.3547	-.3701
135.000	-.3446	-.3555	-.3632
180.000	-.3523	-.3576	-.3506
225.000	-.3507	-.3549	-.3440
270.000	-.3509	-.3515	-.3530
315.000	-.3517	-.3584	-.3498

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X33)

ALPHA0(7) = 2.010 BETA0 (1) = -10.080

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4316	-.4401	-.4464
45.000	-.4292	-.4419	-.4472
90.000	-.4316	-.4361	-.4462
135.000	-.4314	-.4332	-.4396
180.000	-.4314	-.4329	-.4306
225.000	-.4314	-.4353	-.4296
270.000	-.4311	-.4390	-.4309
315.000	-.4430	-.4491	-.4414

ALPHA0(7) = 2.000 BETA0 (2) = -8.040

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4314	-.4444	-.4479
45.000	-.4346	-.4438	-.4490
90.000	-.4340	-.4375	-.4455
135.000	-.4314	-.4328	-.4405
180.000	-.4362	-.4352	-.4295
225.000	-.4372	-.4349	-.4358
270.000	-.4372	-.4461	-.3935
315.000	-.4452	-.4458	-.4480

ALPHA0(7) = 2.090 BETA0 (3) = -6.040

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4199	-.4276	-.4377
45.000	-.4181	-.4273	-.4414
90.000	-.4223	-.4250	-.4377
135.000	-.4199	-.4250	-.4324
180.000	-.4218	-.4239	-.4248
225.000	-.4250	-.4255	-.4287
270.000	-.4228	-.4379	-.3128
315.000	-.4297	-.4424	-.4454

ARC11-715 IA14 O1+T12+S12N25+AT10 SRM NOZZLE (RB1X33)

ALPHA0(7) = 1.920 BETA0 (4) = -3.990

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4097	-.4186	-.4270
45.000	-.4134	-.4197	-.4328
90.000	-.4144	-.4199	-.4313
135.000	-.4134	-.4186	-.4265
180.000	-.4139	-.4186	-.4196
225.000	-.4152	-.4223	-.4260
270.000	-.4134	-.4286	-.2922
315.000	-.4186	-.4307	-.4384

ALPHA0(7) = 1.920 BETA0 (5) = -2.020

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4068	-.4063	-.4208
45.000	-.4066	-.4108	-.4295
90.000	-.4058	-.4100	-.4248
135.000	-.4060	-.4084	-.4174
180.000	-.4052	-.4095	-.4130
225.000	-.4050	-.4103	-.4114
270.000	-.4055	-.4190	-.3903
315.000	-.4055	-.4134	-.4185

ALPHA0(7) = 1.920 BETA0 (6) = .010

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3823	-.3841	-.3945
45.000	-.3815	-.3849	-.4011
90.000	-.3815	-.3843	-.4035
135.000	-.3812	-.3887	-.3977
180.000	-.3857	-.3864	-.3888
225.000	-.3849	-.3864	-.3875
270.000	-.3852	-.3930	-.3535
315.000	-.3841	-.3901	-.3941

ARC:1-716 IA14 OL+T12+S12N25+AT1U SRM NOZZLE (RB1X33)

ALPHAO(7) = 1.920 BETAO (7) = 2.050

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3838	-.3856	-.3934
45.000	-.3856	-.3859	-.3957
90.000	-.3867	-.3873	-.4031
135.000	-.3877	-.3926	-.4010
180.000	-.3885	-.3939	-.3916
225.000	-.3870	-.3894	-.3921
270.000	-.3859	-.3902	-.3854
315.000	-.3856	-.3878	-.3918

ALPHAO(7) = 1.900 BETAO (8) = 4.080

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3858	-.3836	-.3921
45.000	-.3863	-.3831	-.3940
90.000	-.3836	-.3911	-.4005
135.000	-.3815	-.3908	-.4006
180.000	-.3863	-.3900	-.3899
225.000	-.3850	-.3887	-.3865
270.000	-.3852	-.3858	-.3796
315.000	-.3834	-.3881	-.3823

ALPHAO(7) = 2.040 BETAO (9) = 6.080

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3759	-.3791	-.3912
45.000	-.3762	-.3789	-.3907
90.000	-.3805	-.3809	-.3979
135.000	-.3781	-.3867	-.3939
180.000	-.3831	-.3891	-.3815
225.000	-.3812	-.3867	-.3783
270.000	-.3765	-.3814	-.3762
315.000	-.3759	-.3801	-.3735

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1x33)

ALPHA0(7) = 2.030 BETA0 (10) = 8.110

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3802	-.3732	-.3841
45.000	-.3466	-.3753	-.3945
90.000	-.3676	-.3748	-.3778
135.000	-.3697	-.3748	-.3965
180.000	-.3737	-.3794	-.3722
225.000	-.3715	-.3725	-.3482
270.000	-.3665	-.3719	-.3651
315.000	-.3721	-.3722	-.3556

ALPHA0(7) = 2.350 BETA0 (11) = 10.150

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3560	-.3581	-.3803
45.000	-.3590	-.3568	-.3802
90.000	-.3441	-.3566	-.3760
135.000	-.3499	-.3568	-.3661
180.000	-.3542	-.3568	-.3552
225.000	-.3536	-.3563	-.3512
270.000	-.3483	-.3510	-.3443
315.000	-.3504	-.3571	-.3451

ALPHA0(8) = 4.300 BETA0 (1) = -9.980

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4227	-.4251	-.4354
45.000	-.4264	-.4259	-.4356
90.000	-.4253	-.4285	-.4341
135.000	-.4259	-.4270	-.4335
180.000	-.4251	-.4256	-.4238
225.000	-.4251	-.4251	-.4202
270.000	-.4256	-.4251	-.4223
315.000	-.4251	-.4272	-.4257

ARC11-716 IA14 OX+T1E+S12NRS+AT1G SRM NOZZLE (RB1X33)

ALPHA0(0) = 4.050 BETA0 (2) = -8.090

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4262	-.4338	-.4407
45.000	-.4267	-.4338	-.4457
90.000	-.4263	-.4335	-.4446
135.000	-.4272	-.4328	-.4393
180.000	-.4299	-.4355	-.4390
225.000	-.4320	-.4325	-.4316
270.000	-.4298	-.4338	-.4263
315.000	-.4307	-.4357	-.4337

ALPHA0(0) = 4.200 BETA0 (3) = -5.990

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4185	-.4268	-.4321
45.000	-.4181	-.4268	-.4395
90.000	-.4192	-.4264	-.4384
135.000	-.4221	-.4234	-.4363
180.000	-.4221	-.4242	-.4284
225.000	-.4225	-.4265	-.4242
270.000	-.4213	-.4292	-.3843
315.000	-.4234	-.4260	-.4326

ALPHA0(0) = 4.200 BETA0 (4) = -9.970

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4085	-.4120	-.4222
45.000	-.4120	-.4130	-.4241
90.000	-.4109	-.4146	-.4262
135.000	-.4109	-.4154	-.4275
180.000	-.4149	-.4151	-.4207
225.000	-.4138	-.4162	-.4205
270.000	-.4107	-.4196	-.3567
315.000	-.4109	-.4162	-.4197

C9

ARC11-716 IA14 O1+T12+S12N25+AT10 SRM NOZZLE (RB1X33)

ALPHAO(8) = 4.220 BETAO (5) = -2.000

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3964	-.4069	-.4153
45.000	-.4027	-.4064	-.4179
90.000	-.4024	-.4058	-.4174
135.000	-.4051	-.4079	-.4214
180.000	-.4064	-.4084	-.4139
225.000	-.4069	-.4140	-.4112
270.000	-.4019	-.4111	-.3624
315.000	-.4024	-.4121	-.4076

ALPHAO(8) = 4.240 BETAO (6) = -.070

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3858	-.3898	-.3992
45.000	-.3837	-.3898	-.3982
90.000	-.3829	-.3897	-.3990
135.000	-.3895	-.3905	-.4053
180.000	-.3900	-.3924	-.3940
225.000	-.3906	-.3931	-.3932
270.000	-.3903	-.3924	-.3462
315.000	-.3895	-.3905	-.3911

ALPHAO(8) = 4.220 BETAO (7) = 1.990

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3829	-.3929	-.3995
45.000	-.3898	-.3929	-.4016
90.000	-.3932	-.3964	-.4064
135.000	-.3919	-.4011	-.4090
180.000	-.3950	-.3985	-.3955
225.000	-.3964	-.3964	-.3958
270.000	-.3911	-.3956	-.3772
315.000	-.3929	-.3958	-.3929

ARC11-716 IA14 O1+T12+S12N25+AT10 SRM NOZZLE (RB1X33)

ALPHAO(8) = 4.430 BETAO (8) = 4.190

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3786	-.3892	-.3916
45.000	-.3815	-.3879	-.3979
90.000	-.3813	-.3895	-.3945
135.000	-.3826	-.3905	-.4008
180.000	-.3823	-.3876	-.3880
225.000	-.3876	-.3947	-.3893
270.000	-.3821	-.3926	-.3543
315.000	-.3836	-.3873	-.3788

ALPHAO(8) = 4.410 BETAO (9) = 6.060

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3691	-.3704	-.3804
45.000	-.3685	-.3714	-.3902
90.000	-.3691	-.3725	-.3878
135.000	-.3691	-.3767	-.3862
180.000	-.3691	-.3743	-.3710
225.000	-.3699	-.3764	-.3710
270.000	-.3672	-.3720	-.3620
315.000	-.3709	-.3722	-.3657

ALPHAO(8) = 4.410 BETAO (10) = 8.150

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3513	-.3568	-.3666
45.000	-.3515	-.3584	-.3769
90.000	-.3518	-.3626	-.3772
135.000	-.3550	-.3621	-.3716
180.000	-.3571	-.3653	-.3630
225.000	-.3547	-.3640	-.3593
270.000	-.3531	-.3560	-.3535
315.000	-.3550	-.3571	-.3517

ARC11-716 IA14 O1+T12+S12N25+AT10 SRM NOZZLE (RB1X33)

ALPHAO(8) = 4.390 BETAO (11) = 10.140

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3480	-.3504	-.3592
45.000	-.3480	-.3547	-.3724
90.000	-.3441	-.3581	-.3764
135.000	-.3504	-.3555	-.3706
180.000	-.3547	-.3594	-.3583
225.000	-.3549	-.3621	-.3546
270.000	-.3475	-.3529	-.3428
315.000	-.3478	-.3518	-.3404

ALPHAO(9) = 6.340 BETAO (1) = -9.960

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4176	-.4247	-.4326
45.000	-.4184	-.4279	-.4376
90.000	-.4216	-.4271	-.4368
135.000	-.4245	-.4287	-.4347
180.000	-.4229	-.4279	-.4222
225.000	-.4224	-.4245	-.4217
270.000	-.4197	-.4255	-.4224
315.000	-.4226	-.4308	-.4266

ALPHAO(9) = 6.380 BETAO (2) = -7.970

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4264	-.4285	-.4406
45.000	-.4287	-.4287	-.4448
90.000	-.4287	-.4327	-.4435
135.000	-.4282	-.4303	-.4366
180.000	-.4285	-.4285	-.4244
225.000	-.4277	-.4282	-.4244
270.000	-.4277	-.4285	-.4197
315.000	-.4285	-.4306	-.4307

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ARC11-716 IA14 O1+T12+S12N25+AT10 SRM NOZZLE (RB1X33)

ALPHAO(9) = 5.980 BETAO (3) = -6.000

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4234	-.4280	-.4353
45.000	-.4213	-.4258	-.4389
90.000	-.4210	-.4245	-.4371
135.000	-.4195	-.4239	-.4287
180.000	-.4203	-.4234	-.4249
225.000	-.4203	-.4237	-.4234
270.000	-.4210	-.4242	-.3950
315.000	-.4218	-.4247	-.4255

ALPHAO(9) = 5.990 BETAO (4) = -4.010

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4137	-.4153	-.4218
45.000	-.4121	-.4155	-.4337
90.000	-.4113	-.4184	-.4253
135.000	-.4124	-.4158	-.4200
180.000	-.4126	-.4195	-.4215
225.000	-.4153	-.4189	-.4176
270.000	-.4132	-.4195	-.3691
315.000	-.4142	-.4195	-.4192

ALPHAO(9) = 6.010 BETAO (5) = -2.060

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4144	-.4168	-.4200
45.000	-.4118	-.4179	-.4297
90.000	-.4102	-.4147	-.4237
135.000	-.4116	-.4166	-.4234
180.000	-.4179	-.4184	-.4228
225.000	-.4184	-.4189	-.4181
270.000	-.4134	-.4224	-.3719
315.000	-.4147	-.4176	-.4160

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X33)

ALPHAO(9) = 6.020 BETAO (6) = .050

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3985	-.4005	-.4105
45.000	-.3936	-.4026	-.4129
90.000	-.3989	-.3984	-.4020
135.000	-.3952	-.3992	-.4105
180.000	-.4010	-.4055	-.4036
225.000	-.4007	-.4013	-.3979
270.000	-.3939	-.3997	-.3763
315.000	-.3936	-.3999	-.3979

ALPHAO(9) = 6.010 BETAO (7) = 2.060

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3998	-.4009	-.4111
45.000	-.4001	-.4001	-.4145
90.000	-.3969	-.4040	-.4077
135.000	-.4017	-.4035	-.4124
180.000	-.4022	-.4056	-.4077
225.000	-.3996	-.4079	-.4051
270.000	-.3998	-.4064	-.3851
315.000	-.4001	-.4040	-.4030

ALPHAO(9) = 5.990 BETAO (8) = 4.060

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3853	-.3892	-.3968
45.000	-.3876	-.3902	-.4042
90.000	-.3845	-.3913	-.4023
135.000	-.3860	-.3939	-.4005
180.000	-.3905	-.3963	-.3937
225.000	-.3887	-.3939	-.3965
270.000	-.3868	-.3945	-.3719
315.000	-.3887	-.3916	-.3874

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X33)

ALPHA0(9) = 5.980 BETA0 (9) = 6.090

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3781	-.3770	-.3865
45.000	-.3741	-.3789	-.3936
90.000	-.3697	-.3802	-.3907
135.000	-.3726	-.3836	-.3897
180.000	-.3852	-.3831	-.3804
225.000	-.3741	-.3815	-.3799
270.000	-.3747	-.3765	-.3704
315.000	-.3747	-.3784	-.3731

ALPHA0(9) = 5.970 BETA0 (10) = 8.160

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3680	-.3773	-.3837
45.000	-.3679	-.3771	-.3900
90.000	-.3621	-.3721	-.3802
135.000	-.3666	-.3694	-.3831
180.000	-.3642	-.3745	-.3745
225.000	-.3663	-.3755	-.3716
270.000	-.3642	-.3758	-.3664
315.000	-.3644	-.3713	-.3674

ALPHA0(9) = 5.990 BETA0 (11) = 10.160

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3523	-.3636	-.3718
45.000	-.3570	-.3660	-.3818
90.000	-.3554	-.3644	-.3771
135.000	-.3557	-.3668	-.3786
180.000	-.3662	-.3689	-.3673
225.000	-.3625	-.3702	-.3649
270.000	-.3536	-.3607	-.3529
315.000	-.3591	-.3641	-.3550

ARC11-716 IA14 O1+T12+S12N25+AT10 SRM NOZZLE (RB1X33)

ALPHAO(10) = 7.910 BETAO (1) = -10.030

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4096	-.4214	-.4277
45.000	-.4169	-.4224	-.4287
90.000	-.4161	-.4259	-.4358
135.000	-.4224	-.4285	-.4329
180.000	-.4256	-.4266	-.4228
225.000	-.4232	-.4248	-.4215
270.000	-.4188	-.4230	-.4160
315.000	-.4161	-.4214	-.4170

ALPHAO(10) = 7.930 BETAO (2) = -8.030

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4121	-.4255	-.4306
45.000	-.4211	-.4258	-.4369
90.000	-.4219	-.4314	-.4453
135.000	-.4274	-.4330	-.4388
180.000	-.4310	-.4294	-.4272
225.000	-.4282	-.4272	-.4246
270.000	-.4237	-.4262	-.4230
315.000	-.4200	-.4267	-.4238

ALPHAO(10) = 7.810 BETAO (3) = -5.970

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4173	-.4226	-.4279
45.000	-.4168	-.4249	-.4408
90.000	-.4189	-.4274	-.4426
135.000	-.4218	-.4248	-.4345
180.000	-.4226	-.4230	-.4237
225.000	-.4200	-.4222	-.4245
270.000	-.4244	-.4240	-.4091
315.000	-.4194	-.4227	-.4232

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ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X33)

ALPHAD(10) = 7.830 BETAD (4) = -4.000

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4085	-.4163	-.4268
45.000	-.4163	-.4163	-.4367
90.000	-.4145	-.4231	-.4365
135.000	-.4158	-.4192	-.4221
180.000	-.4166	-.4181	-.4217
225.000	-.4182	-.4194	-.4204
270.000	-.4148	-.4228	-.3859
315.000	-.4158	-.4189	-.4212

ALPHAD(10) = 7.830 BETAD (5) = -2.030

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4152	-.4204	-.4296
45.000	-.4155	-.4215	-.4388
90.000	-.4207	-.4259	-.4401
135.000	-.4170	-.4210	-.4259
180.000	-.4223	-.4238	-.4275
225.000	-.4223	-.4231	-.4246
270.000	-.4186	-.4275	-.3929
315.000	-.4191	-.4228	-.4230

ALPHAD(10) = 7.840 BETAD (6) = .040

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3967	-.4030	-.4137
45.000	-.3967	-.4032	-.4150
90.000	-.3967	-.4014	-.4140
135.000	-.3964	-.4027	-.4061
180.000	-.3962	-.4040	-.4021
225.000	-.3990	-.4038	-.3984
270.000	-.3993	-.4006	-.3828
315.000	-.4004	-.4022	-.4021

ARC11-716 IA14 01+T12+S12N25+AT10 SRM NOZZLE (RB1X33)

ALPHAD(10) = 7.830 BETAD (7) = 2.040

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3984	-.4050	-.4169
45.000	-.3971	-.4029	-.415
90.000	-.3990	-.4056	-.4
135.000	-.3995	-.4013	-.4062
180.000	-.4013	-.4024	-.4011
225.000	-.4011	-.4016	-.3974
270.000	-.4024	-.4048	-.3974
315.000	-.4037	-.4058	-.4061

ALPHAD(10) = 7.870 BETAD (8) = 4.080

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3839	-.3921	-.4031
45.000	-.3894	-.3976	-.4068
90.000	-.3871	-.3950	-.4034
135.000	-.3847	-.3960	-.4002
180.000	-.3905	-.3971	-.3966
225.000	-.3929	-.3950	-.3945
270.000	-.3905	-.3915	-.3803
315.000	-.3931	-.3934	-.3890

ALPHAD(10) = 7.970 BETAD (9) = 6.160

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3797	-.3860	-.3963
45.000	-.3794	-.3857	-.4073
90.000	-.3771	-.3842	-.3942
135.000	-.3768	-.3855	-.3879
180.000	-.3847	-.3873	-.3838
225.000	-.3813	-.3852	-.3796
270.000	-.3789	-.3844	-.3788
315.000	-.3847	-.3860	-.3825

ARC11-716 IA14 OR+T12+S12N25+AT10 SRM NOZZLE (RB1X33)

ALPHAO(10) = 7.980 BETAO (10) = 8.110

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3753	-.3827	-.3918
45.000	-.3761	-.3821	-.4318
90.000	-.3696	-.3758	-.3858
135.000	-.3748	-.3774	-.3800
180.000	-.3717	-.3751	-.3765
225.000	-.3756	-.3737	-.3744
270.000	-.3745	-.3756	-.3725
315.000	-.3816	-.3793	-.3815

ALPHAO(10) = 7.980 BETAO (11) = 10.230

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3629	-.3721	-.3874
45.000	-.3690	-.3742	-.3979
90.000	-.3624	-.3695	-.3822
135.000	-.3634	-.3703	-.3737
180.000	-.3661	-.3711	-.3747
225.000	-.3626	-.3711	-.3682
270.000	-.3658	-.3698	-.3687
315.000	-.3721	-.3745	-.3729

ALPHAO(11) = 9.890 BETAO (1) = -9.960

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4139	-.4230	-.4218
45.000	-.4215	-.4228	-.4272
90.000	-.4202	-.4272	-.4298
135.000	-.4236	-.4306	-.4356
180.000	-.4296	-.4322	-.4311
225.000	-.4285	-.4303	-.4259
270.000	-.4241	-.4287	-.4230
315.000	-.4219	-.4230	-.4193

ARC11-716 TA14 D1+T12+S12N25+AT10 SRM NOZZLE (NB1X33)

ALPHAD(11) = 9.930 BETAD (2) = -7.920

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.8790	.9930
PHI			
.000	-.4180	-.4249	-.4282
45.000	-.4202	-.4247	-.4288
90.000	-.4268	-.4288	-.4372
135.000	-.4265	-.4315	-.4404
180.000	-.4307	-.4307	-.4314
225.000	-.4336	-.4307	-.4280
270.000	-.4273	-.4273	-.4290
315.000	-.4234	-.4231	-.4209

ALPHAD(11) = 9.940 BETAD (3) = -6.010

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4194	-.4247	-.4320
45.000	-.4249	-.4247	-.4391
90.000	-.4254	-.4325	-.4467
135.000	-.4323	-.4357	-.4448
180.000	-.4333	-.4330	-.4319
225.000	-.4317	-.4320	-.4314
270.000	-.4275	-.4296	-.4259
315.000	-.4254	-.4257	-.4259

ALPHAD(11) = 9.890 BETAD (4) = -3.990

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4202	-.4279	-.4399
45.000	-.4209	-.4337	-.4494
90.000	-.4277	-.4365	-.4530
135.000	-.4292	-.4344	-.4391
180.000	-.4334	-.4342	-.4328
225.000	-.4313	-.4326	-.4328
270.000	-.4274	-.4284	-.4179
315.000	-.4311	-.4326	-.4315

ARC11-716 IA14 CR+T12+S12N25+AT10 SRM NOZZLE (R51X33)

ALPHA0(11) = 0.900 BETA0 (5) = -1.980

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9180	.9790	.9930
PHI			
.000	-.4114	-.4172	-.4303
45.000	-.4148	-.4235	-.4300
90.000	-.4161	-.4245	-.4324
135.000	-.4160	-.4203	-.4219
180.000	-.4161	-.4209	-.4156
225.000	-.4167	-.4151	-.4151
270.000	-.4151	-.4209	-.4083
315.000	-.4180	-.4209	-.4182

ALPHA0(11) = 0.910 BETA0 (6) = .020

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3929	-.4031	-.4117
45.000	-.3949	-.4031	-.4133
90.000	-.3934	-.4004	-.4078
135.000	-.3960	-.3963	-.4007
180.000	-.3963	-.3960	-.3946
225.000	-.3963	-.3957	-.3943
270.000	-.3976	-.4012	-.3920
315.000	-.4004	-.4046	-.4008

ALPHA0(11) = 0.900 BETA0 (7) = 2.040

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.4057	-.4068	-.4183
45.000	-.4047	-.4070	-.4214
90.000	-.4049	-.4068	-.4165
135.000	-.4044	-.4043	-.4068
180.000	-.4044	-.4039	-.4016
225.000	-.4044	-.4031	-.4021
270.000	-.4044	-.4058	-.4038
315.000	-.4060	-.4091	-.4089

ARC11-716 TA14 D1+T12+S12N25+AT10 SRM NOZZLE (RB1*33)

ALPHAD(11) = 9.900 BETAD (8) = 4.130

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3916	-.3955	-.4055
45.000	-.3916	-.3966	-.4141
90.000	-.3945	-.3984	-.4104
135.000	-.3913	-.3942	-.4018
180.000	-.3939	-.3913	-.3937
225.000	-.3921	-.3950	-.3945
270.000	-.3937	-.3963	-.3943
315.000	-.3981	-.3973	-.3932

ALPHAD(11) = 9.880 BETAD (9) = 6.100

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3830	-.3866	-.3929
45.000	-.3830	-.3898	-.4062
90.000	-.3832	-.3889	-.4026
135.000	-.3827	-.3843	-.3851
180.000	-.3830	-.3856	-.3820
225.000	-.3824	-.3819	-.3814
270.000	-.3798	-.3809	-.3791
315.000	-.3843	-.3848	-.3796

ALPHAD(11) = 9.870 BETAD (10) = 8.110

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3820	-.3836	-.3942
45.000	-.3773	-.3842	-.4084
90.000	-.3731	-.3855	-.4030
135.000	-.3779	-.3774	-.3819
180.000	-.3734	-.3792	-.3714
225.000	-.3718	-.3769	-.3728
270.000	-.3773	-.3803	-.3758
315.000	-.3818	-.3855	-.3804

ARC11-71E IA14 O1>T12+S12N25>AT10 SRM NOZZLE (RB1X33)

ALPHAO(11) = 10.000 BETAO (11) = 10.190

SECTION (1)SRM NOZZLE DEPENDENT VARIABLE CP

X/LS	.9480	.9790	.9930
PHI			
.000	-.3773	-.3857	-.3969
45.000	-.3694	-.3870	-.4087
90.000	-.3710	-.3820	-.4003
135.000	-.3731	-.3770	-.3799
180.000	-.3726	-.3765	-.3724
225.000	-.3687	-.3768	-.3711
270.000	-.3718	-.3786	-.3708
315.000	-.3781	-.3838	-.3787